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ABSTRACT

The case study examined the development of an overall education plan for the Trust Territory of the Pacific Islands. The methodology of multidisciplinary education planning through the use of general comparative analysis models of political, economic, and social development is explained: Almond and Powell's framework for the analysis of political systems, Ward H. Goodenough's paradigm of wants and needs of change agents and their clients, and Harbison and Myers' model for human resource development. Both the strengths and weaknesses of the methodology and the models alike are discussed: the validity of comparison, reliance on judgmental analysis, and the needs for precision propositions, cost analysis data, and educational research. The needs for political and economic development and social change are considered from two points of view: the definition of the goals, and the relationships within and between these systems and education that are necessary for goal attainment. The models were used to determine the relationships and to logically analyze their (models) applications to the conditions in this developing area. It is assumed that education is necessary for goal attainment: leadership development, manpower and economic development, and participation of the people in the decision-making processes. (SBE)

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FOREWORD

The Trust Territory of the Pacific Islands is of unusual interest to the student of modernization. In some ways its name, Micronesia, suggests why. Despite its small population of less than 100,000 people, it represents in microcosm many of the issues and problems of development -- economic, social, and political. Its geographical position, in the aviation-electronics age, puts it on the path of change, whether or not its people seek change. The foreign administrations in its history -- German, Japanese, American -- have left a variety of influences. Its economic dependence on the current trustee provides great economic contrasts between Micronesians participating in non-subsistence sectors and their counterparts in the much larger island neighbors of the Philippines, Indonesia, and Taiwan. Its internal cultural and linguistic differentiation -- not surprising in peoples who live on islands separated by hundreds of miles of sea -- pose many issues, including the basic one of whether some kind of Micronesian unity can or should be sought.

These and other fascinations concerned us at the Stanford Research Institute when we were seeking the right team to carry out a project for the Trust Territory of the Pacific Islands in 1967. The project was to assist in master planning for education and manpower in Micronesia.

It seems likely that a factor contributing to the selection of the SRI proposal over those of competing contractors was its project staffing plan. The plan provided for augmenting the SRI staff experienced in education and manpower planning with personnel from the Stanford International Development Education Center and with other consultants having a special knowledge about the peoples of Micronesia.

Thus it was that upon project authorization we were able to organize a team of eight people of particular qualifications for part- or full-time work on the project. Among the eight team members, the social science disciplines represented included anthropology, sociology, economics, psychology, and history. Professional experience included educational administration, educational planning, and urban planning. We were even fortunate in achieving some variety in nationalities; team members were from Canada, Australia, the Netherlands, and the United States. This national variation seems particularly appropriate as a means of helping guard against national biases in a project undertaken for a people who are administered under a United Nations trusteeship.

The project[1] was carried out over a period of six months, including report writing. In the study we developed projections of the

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[1] See William J. Platt and Philip A. Sorensen, Planning for Education and Manpower in Micronesia, Stanford Research Institute, Menlo Park, Calif., 1967.

manpower structures likely to find employment. We sketched out the possible evolution of the educational system and the pupil flows that might be expected through that system in 1977. We discussed a number of reforms of educational content and method that would make education more relevant to Micronesian development. We proposed patterns of adult education, occupational education, and teacher training that fitted into the master planning. And we identified and discussed policies and institutional machinery designed to help human development flourish in Micronesia.

But the report had to be prepared quickly and to confine itself to practical problems of development strategy. It seems quite appropriate and useful, therefore, that two of the SRI team members -- two whose studies at Stanford University gave them access to relevant theory of development -- could take the time to reflect on their experiences in Micronesia and to prepare the following paper. Richard Pearse and Keith Bezanson are well equipped for this task. Pearse, an Australian, had had experience in research on educational administration of Pacific Island people before coming to Stanford. Bezanson had worked in educational development in Nigeria as a Volunteer in Canadian Universities Service Overseas. Both had demonstrated in their participation in the planning project for Micronesia unusual transcultural sensitivity as well as good skills as development analysts and planners. It was an honor to be their colleague in the project, just as it is now to offer remarks prefacing their monograph.

William J. Platt

Paris
September 1969

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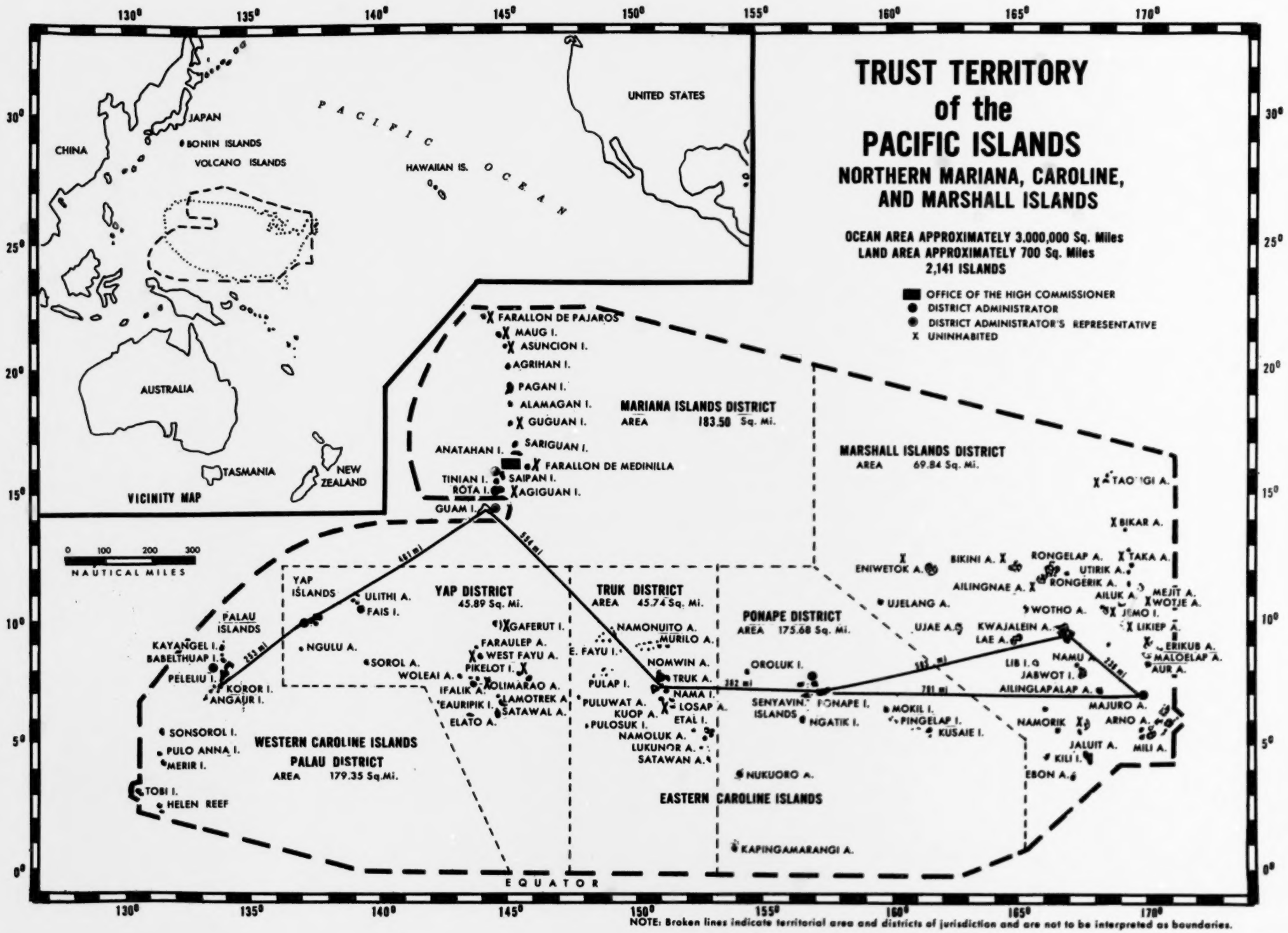

NOTE: Broken lines indicate territorial area and districts of jurisdiction and are not to be interpreted as boundaries.

PREFACE

The authors of this monograph, while graduate students at the Stanford International Development Education Center (SIDEC), served as consultants to a Stanford Research Institute Team which prepared an overall education plan for the Trust Territory of the Pacific Islands (Micronesia).

This monograph is designed to examine that plan, and the methodology of planning on which it is based, through the perspective of general models of political, economic, and social development evolved by the social sciences, in the expectation that such critical examination will expose both strengths and weaknesses of the methodology and models alike, and thereby add to an understanding of planning problems.

We wish to thank the Stanford Research Institute and the Stanford International Development Education Center for the assistance given to us in this project, and to thank Mr. J. Hawkins and Mr. F. Mahony for their advice on the manuscript. Any errors of omission and commission are ours.

Richard Pearse
Keith A. Bezanson

CHAPTER I

INTRODUCTION

An obvious emphasis in modern educational planning -- and one of quite recent vintage -- is the interdisciplinary character of its method. Not too long ago educational planning was entirely in the hands of the educational administrator. The years following World War II brought a number of developments which first challenged and then pre-empted the role of the educational administrator as planner. The post-war population explosion, coupled with the growing demand for education as a human right, created new pressures for refinements in educational planning. Attempts to apply educational theory to the multitudinous developing countries everywhere springing into existence resulted in the revelation that the theory and the practice were fit for domestic consumption only and could not satisfactorily be exported to these new nations. Then the economist entered the picture and gave education a new respectability by demonstrating that it could legitimately be viewed as an economic investment as opposed to a necessary social cost.

Educational planning soon fell entirely into the domain of the economist who was able to view education as an independent variable whose function was to provide sufficient numbers of adequately trained persons for economically necessary positions.

However, the pendulum was to swing back and in so doing to challenge the hegemony of the economist. Man was not purely an economic animal, and it was claimed that economic educational planning per se was unable to do justice to man's social, psychological, and political needs as these related to education. Moreover, attempts at manpower planning did not yield consistently impressive results. The benefits to be derived from a multi-disciplinary approach seemed obvious; accordingly, planners and their critics urged that such an approach be taken.

The result has been in recent years a heightened interest in and emphasis on multi-disciplinary planning. Ours is a case study in such planning. We have taken one area of the world, Micronesia, with its special problems and unique variables, and have attempted to view systematically the contribution that a multi-disciplinary approach might make to the planned development of that area. We have drawn upon models and strategies suggested by the various disciplines, and we have examined the assumptions and development plans already extant in Micronesia. Finally, we have attempted to extrapolate from the information gathered and to suggest areas that have been overlooked and which are in need of attention.

CHAPTER II

POLITICAL STRUCTURE AND CHANGE IN MICRONESIA

The Traditional Structures

The Trust Territory of the Pacific Islands is a political rather than a geographic or cultural entity. It is a collection of 96 inhabited island groups which are spread over 3,000,000 square miles of the western Pacific, an area comparable in size to continental United States or to the continent of Australia. Prior to contact with the west, the islands were inhabited by several times the present population of 88,000 people.

The traditional social groups who inhabited the islands made up as many as thirteen distinct, separate, and isolated socio-political entities (Murdock 1948a). Between them there was no regular contact, and traditions indicate that the contacts which had occurred in the past were motivated by attempts of one group to subjugate another by war.

Within these groups, the pattern of contact varied. In the Western Caroline Islands chain (Lessa 1966) the island societies were linked through a set of chiefs arranged in hierarchical levels. A chief at each level was the focus for a field of authority over the lesser chiefs on neighboring islands and for the maintenance of a flow of tribute from his own island to the chiefs of higher authority. Chiefly authority, the flow of tribute, and the cultural similarity of the island communities maintained links between the sixteen main islands of the group. Where the people of a single large island were able to control those on small nearby atolls as in the Ponape group, or those of another large island as in Kusai, greater stability was often achieved (Murdock 1948a). At one time, before contact with the west, Ponape was unified under the leadership of a paramount chief. In these societies there were, however, struggles for authority between the groups which composed the society. This degree of stable contact within a pattern of ordered relationships was the exception rather than the rule. In the Marshall Islands there were many independent chiefs in control of different islands, and contact with neighboring islands was in the form of wars to enlarge the sphere of influence of a temporarily powerful social group. A similar pattern of inter-community competition for authority was expressed in warfare among the other island groups.

Viewed in comparative perspective against the Polynesian peoples to the east and the Melanesian peoples to the south, the traditional cultures and societies of Micronesia can be considered similar, although the societies on the edges of the current political boundary have more in common with their neighbors in Polynesia than with some other Micronesian societies. But, seen in relation to one another, the

Micronesian societies exhibit marked differences in form and in cultures. Recent ethnography emphasizes the heterogeneity rather than the similarity to be found among island groups (Mason 1968). Moreover these differences in traditional culture have been heightened by acculturation influences such that the Chamorro people of the Marianas, for example, are sharply differentiated in social structure, residence and occupational patterns from the other island societies by virtue of 300 years' domination by Spain and other colonial powers.

Despite this contact with the west, the dominant theme in Micronesia is one of social and cultural continuity (the Marianas excepted). Mason, writing in 1968, notes that:

> Culturally, the contemporary island societies are still more Micronesian than anything else. To describe their traditions in the past tense would be a distinct disservice to the living generations.

Accordingly, though a brief overview of traditional society cannot capture the complexity and do justice to the differences between the societies, it provides the general context in which education planning must proceed.

Micronesian societies consist of descent groups arranged on matrilineal lines. Some societies recognize limited forms of bilateral descent, but the major resource of land is inherited through the matrilineal line. Many combine matrilocal residence with matrilineal descent; others provide for options in residence and it may take patrilocal form. The descent groups are combined in clans and the clans are often dispersed on an island or across neighboring island groups (Murdock 1948a). The lineage is typically a small unit, those on Truk numbering usually from 30 to 40 members (Murdock 1948b; Goodenough 1948). A number of lineages constitute a clan and a number of classes make up the social units of villages. Villages, linked by overlapping class-formed groupings, unite, at least temporarily, under a chief, and these chiefly units which are identified with a land area often combine to form confederations. Confederations in turn may form a sociopolitical unit, united with varying degrees of stability under the influence of a paramount chief (Vidich 1949).

The degree of vertical integration of the sociopolitical units varies from society to society and across time within societies, partly as a function of the dynamic provided by a continual striving for prestige and control over land resources by the groups within the island societies. In the nineteenth century, Palau had a number of paramount chiefs among whom two established greater power. These chiefs and their followers divided the island into two competing political systems. In the Marshalls, conflicts among a number of competing chiefdoms continued into the late nineteenth century (Murdock 1948a).

Within Micronesian societies, the clans are arranged in a series of hierarchical ranking clans of unequal status. Thus, Micronesian

society is far from being egalitarian. Mason (1947) and Murdock (1948a) have both applied feudal analogies to the relationships among these social groups. The inequality of ranks and of participation in the society which applied throughout Micronesia is well illustrated by Palau as described by Vidich (1949). The Meteet were the clan groups who could trace descent to the two topmost ranking clans. They were wealthy, possessed a superior knowledge of the island's culture, possessed exclusive knowledge of certain classes of Palauan money, and wielded authority. The Bukalul could trace connections with the Meteet, but not with the highest clans. They had a knowledge of history, special but not exclusive knowledge of some classes of Palauan money, and they served as a check on the authority of the Meteet. Below these in authority and participation were the Olues Blue who were excluded from political power and knowledge of Palauan history and money, and the Ebuul who were recent migrants in the position of having to show respect to all.

The economies of Micronesian societies also exhibit common general characteristics. The family was the unit through which the individual had access to the land he needed for subsistence. Its rights in turn were derived from its membership in a clan and the clan's rights by virtue of its relationship to a chief.

The individual's membership in a kin group and his relationship in rank to the chief provided the system of incentives which regulated production, given a technology which would produce only non-storable foodstuffs and the lack of a market system. Thus, the family was required to meet obligations to kin, to overproduce in order to meet the needs of poorer kinsmen. The family responded to the demand to pay tithes to the chiefs in order that the chief, in an unequal but nevertheless reciprocal way, could distribute the excess production and thus gain reputation and followers (Sahlins 1968: 75-79).

This description of access to land resources, the organization of production, and the incentives for production illustrates the way in which the economic systems throughout Micronesia were embedded in the social and political systems. Not only were their boundaries co-terminous, but a man's kinship position, his social status, his access to wealth, and his relationship to the hierarchy of chiefs were but different aspects of his single location in the kinship structure.

The economic system, though based on the principal of reciprocity among members of the lineage and between groups as large as island societies, also formed a basis for social and political rivalry between individuals and groups through linkages with the system of unequal ranks. The status of individuals and groups did, over time, change within limits, and the accumulation and display of wealth formed an important base for status mobility. Mason (1968: 289) notes that economic and social competitiveness was common in all societies, though manifest more openly in some than in others. Thus motivations toward the acquisition of wealth and toward changes in social status are part of Micronesian culture.

The case of language brings us to consider not only the relationships between the societies deemed "designs for living,"[1] but the relationships between them as seen by the peoples of the separate islands. For it serves little to classify languages as "basically similar" if those who speak them find them mutually unintelligible. Linguistic classification shows that the dialects of Yap, Palau, and the Marianas differ from all the other languages and from each other. The languages for all other Micronesian islands are closely related, and those of the Polynesian groupings are similar to each other but different from all others in Micronesia. A socio-linguistic classification, however, based on the criterion of mutual intelligibility of languages, appears to support a larger number of distinctions.[2]

The relationship of any Micronesian kin group to other kin groups was between those who belonged to the same culture area. Cultural diversity was not experienced. Relations within the kin group were supportive and positive, although the ranking of clans gave rise to competition for status. Relations among the kin groups organized under chiefs were sometimes overtly competitive and hostile, and even in stable chiefdoms there was competition for power between chiefs and followers. It is not surprising from this pattern of relationships that the traditional orientations of Micronesian societies were distinguished by ethnocentrism and a grading of sociability, morality, and esteem in accordance with the closeness or distance of the kinship relationships. Solidarity was confined to the kin group, and relations with non-kin were actually or incipiently competitive and/or hostile. Contact with the other Micronesians who participated in other sociopolitical units hundreds of miles across the sea was absent.

Thus, the cultural similarity between the Micronesian societies, while it dwarfs the small differences in language, social structures, and political organization, does not promote solidarity between the ranking classes or the groups vying for political authority. Feelings of solidarity are confined to those with whom the individual can share substantive or fictive kinship.

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[1]To adopt Lessa's phrase from Ulithi: A Micronesian Design for Living.

[2]Nine major languages, each with dialect variations are recognized as different for purposes of communication.

The Impact of Contact with the West and East Upon Micronesian Society

The westernmost islands of Micronesia, the Marianas, formally became a possession of Spain in 1564. Left alone for a hundred years, the first Christian mission was set up in 1688 to be followed by severe repression of the Chamorro people. The population rose up against the Spanish and the Spanish retaliated harshly. The Japanese historian, Yanaihara (1940: 41) claims that as a result of the introduction of disease and of repression, the Chamorro population decreased from an estimated 50,000 in 1688 to 3700 in 1710. In the latter year, the remaining population was gathered from the several islands and transported to Guam. This population intermarried with Spanish settlers and the original society was transformed into a familistic one with individual ownership of land in which vestiges of the original culture remained in the language only. The population remained at the same level for two centuries -- the Chamorro population of Saipan in 1935 was recorded at 3,300 (Yanaihara 1940).

Contact between the other islands of Micronesia and the west came much later. Intermittent contact between the island peoples and whalers and copra traders increased during the 18th and 19th centuries. The chief consequence of such contact was the decimation of some island populations through diseases against which Micronesians had no resistance. Toward the latter half of the 19th century, permanent missionary enterprises became established on the major island groups. An American mission was founded in the Marshalls in 1852, a mission on Truk in 1879, and Spanish missions on Palau and Ponape in the mid-1890's. Each mission was small and its influence spread slowly. Mission policies sought to introduce Christianity rather than to change the island societies.

The small unstable chiefdoms became appendages of European empires, one by one, at the close of the 19th century. The Spanish government established offices in Yap and Ponape in 1886-87, and Spanish missionaries arrived in Palau in 1891. By agreement between Germany and Britain the Marshalls became a German protectorate in 1885 and the Gilbert Islands came under the control of Britain. With the Spanish-American War in 1899, Germany bought the Marianas and the Caroline group from Spain and the United States took possession of the Mariana island of Guam.

The present borders of this new political entity of Micronesia were created by warfare and bargaining between the then world powers. The close correspondence between the boundaries of the political entity and the traditional sociocultural entity was essentially accidental, though fortuitous.

Germany's defeat in the 1914-18 war led to the acquisition of control by Japan. Japan established a naval administration during the war and was granted a Class C mandate over Micronesia by the League of Nations in 1922. The major principle of the Class C mandate was that the territory could be best administered under the laws of the mandatory

country as an integral part of the mandatory's territory (Yanaihara 1940). Japan colonized Micronesia as it proceeded to convert the islands into a valuable economic resource. From the mid-1930's, the islands were militarized as a series of bases for Japan's war effort in World War II. The islands were captured by United States forces toward the end of the war. Micronesia came under U.S. Naval administration from 1941 to 1951, became a strategic trusteeship of the United Nations under U. S. administration in 1947, and, with the exception of the Mariana Islands, has been administered by a U. S. civil administration since 1951. The Marianas, under Naval control and the site for a Central Intelligence Agency installation, were also placed under civil control in 1962.

A major characteristic of this contact with foreign powers has been its unevenness across the island societies. Societies in the Marianas were altered radically by 300 years of Spanish influence while the other societies had only marginal contact with the west, and the Mariana societies experienced the most intensive interactions with the Japanese. Within the societies that have been under western administration for just over two and a half generations, contact has also been uneven, although the contrast is less sharp. The German administration was manned by few personnel and the chief non-administrative roles were those of a small number of traders engaged in buying copra. The strongest thrust of Japan's colonization and economic activities was in the productive islands of the Marianas, at first for sugar, and later for the construction of military bases, and of Palau for fishing and extraction of phosphate. The Japanese population in the Marianas in 1935 was approximately 40,000; in Palau in 1938 it was 20,000 (Vidich 1949). For the mandated territory as a whole, the number of Japanese increased from 3,671 in 1920 to 62,305 in 1937, by which time it outnumbered the Micronesian population of 50,849. Those islands which had less potential for economic exploitation but which were used as military bases experienced a small Japanese administration until the late 1920's and then felt a much stronger impact. The Japanese population in the Marshalls in 1938 was only 504[1], but shortly afterwards there was an influx of military labor, and "thousands of troops"[2] were stationed there during the war. The smaller islands which were neither productive nor useful for military bases experienced only a marginal but effective military control.

The second major characteristic of contact has been the sudden reversals of patterns of contact and of policies affecting Micronesian people brought about by changes from one controlling power to another.

The intensity of contact as measured by the number of foreigners in Micronesia forms one graphic illustration.The German administration numbered about 25 officials, all of whom left after the First World War. In 1938, there were 62,305 Japanese in Micronesia, all of whom were repatriated after the Second World War, and in 1960 there were 236 American

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[1]These figures are from Chave (1947) who quotes from a Japanese mandated territory report of October, 1937.

[2]Chave (1947) quotation from L. Mason, The Economic Origin of the Marshalls, April 1947, manuscript.

officials (the figure for foreign-born has increased dramatically since 1960; 1967 data show 2,190 in Micronesia). No less important were reversals in the policies followed for political control of the islands, for the growth of the economies, and for the patterns of cultural evolution which Micronesians should follow. Though these are inseparable in fact, it will assist our analysis to examine these as separate strands of change.

Both Germans and Japanese effected strong administration through policies combining direct and indirect rule. Where chiefs were considered to be ineffective, they were deposed and replaced. The chiefs were made responsible for collection of taxes to be paid to the government. While some chiefs lost power because the administration prohibited warfare and withheld from them the right to impose a death penalty (Chave 1947), others were given greater authority in new judicial powers, as in the case of German-administered Truk (Murdock and Goodenough 1947). Despite these variations, the policies tended to utilize the authority of the chief as an arm of the system of administration. Yet it does appear that, with the exception of Truk, the chiefs' roles were limited essentially to the maintenance of traditional ways and the collection of taxes. It was the German and Japanese officials who exercised the authority which changed the way of life of the people. In Palau, the German constable made and enforced the rules for the planting of new coconuts, and the Japanese Navy and civil administrations made the vital decisions that shaped the economy, set wages, and enforced the law. Chiefs who did not cooperate in development schemes were deposed and their power over the allocation of land and the settlement of disputes was taken over by the administration (Vidich 1949). In Japanese times, the administration began to recruit Micronesians into the lower levels of the bureaucracy, and the Japanese carried on the German practice of admitting Micronesians into the police force.

The policy of the United States administration in the 1950's and early 1960's reversed this strong trend away from chiefly authority. The administration retained control over the agencies of law and order, but sought to increase the role of the chiefs as authorities within customary law and added judicial and administrative functions. It developed mixed elected (non-chiefs) and appointed (chiefs) bodies at the municipal and later at the district level which proffered advice to the administration and made circumscribed local rules. This policy, however, was short lived. In the mid-1960's the policy of the United States administration was to make these local councils, like the Congress of Micronesia, wholly elective bodies. Chiefly office no longer will carry with it chiefly authority in political affairs.

Japanese economic policy was the commercial exploitation of Micronesian resources by Japanese immigrants. The thrust of the policy brought about a radical change in Micronesian society which has had permanent consequences, but paradoxically, it has had little permanent effect upon the pattern of Micronesian agriculture. For despite the

rapid growth of the Micronesian economy during Japanese rule, Micronesians were often involved only at the periphery as laborers and always at very limited levels of skill. The management, the skilled, and even unskilled workers were predominantly Japanese. They built imposing economic enterprises -- almost all of which were wiped out during the Second World War.

> In Palau the Japanese had constructed a modern city as the headquarters for their administration over Micronesia . . . in Truk the Japanese had established a major naval base, commercial fishing, fish freezing and processing . . . on Ponape they had greatly expanded agricultural activities and processing activities based on agricultural produce . . . on Saipan thriving and prosperous enterprises.
>
> After the war, not only the business and the people, but most of the infrastructure -- the roads and causeways, community facilities, electric and water systems, harbor and other facilities were gone.[1]

Yet in those centers where the economic and administrative activity was most intensive in Japanese times, new roles, located outside subsistence agriculture and the ties of kinship, were created for Micronesians. In Palau, the Marianas, and Ponape, there emerged Micronesian government employees, small-scale traders, and small groups of semi-urbanized skilled and unskilled men and their families. These groups were a resource base available for the participation of Micronesians in the growth of administration and the economy under the United States administration.

However, United States economic policy for Micronesia to the mid-1960's did not continue the dynamic generated by the Japanese. The policy was to return to the subsistence agricultural base and to develop copra production as a means for Micronesians to earn a small cash income. Exceptions to this policy were the Marianas, where the population is largely urbanized, and the islands of Kwajalein and Majuro in the Marshalls, which as sites for U.S. rocket bases, became settlements for the families of Micronesian wage laborers. The policy has not applied where these strategic needs of the U.S. were dominant. But on other islands alienation of Micronesian land was restricted and commercial exploitation of the islands by non-Micronesians was curtailed. Clerical work, a few semi-skilled trades, teaching, and medical work were almost the only avenues to the modern economic sector which were open to Micronesians.

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[1] Robert R. Nathan Associates, Economic Development Plan for Micronesia, Washington: Nathan Associates, p. 21. (This paper is hereinafter referred to as the Nathan report.)

United States post-war policy also reversed the Japanese orientation toward cultural activities. The Japanese emphasized a goal of assimilation for the Micronesians who moved toward Japanese patterns of conduct. Their schooling system emphasized the virtues of Japanese modes of life and considerable stress was placed on the learning of the Japanese language. A select few were chosen to pursue post-elementary studies in Japan. The Annual Report to the League of Nations for 1932 describes their treatment:

> The pupils are treated with sympathy and liberality in order to promote good manners and to elevate their personal character so they may grow up capable of enjoying the blessings of advanced civilization.

During United States administration the official policy became one of enabling Micronesians to determine the direction of their own cultural change. American personnel themselves vary widely in the attitudes they adopt toward Micronesian culture. At the policy level, however, and in the institutions which have been established, the objectives are those of adaptation and acculturation rather than assimilation to United States standards. The school system has consistently provided a place for Micronesian languages as well as for English, and the majority of teachers have been recruited locally. From a Micronesian perspective, however, the change in policy has been less salient than the change from a system of rewards located in the nexus of Japanese culture to one associated with the United States.

Despite the more intensive economic, administrative, and educational efforts of the Japanese, Micronesian societies, other than those in the Marianas, showed little permanent change in form at the end of the Second World War. In a survey carried out for the United States administration in 1948, G. P. Murdock (1948b: 2) reported that, except for the Marianas,

> . . . . . the local cultures are everywhere still functional and still essentially aboriginal in character . . . the old subsistence agriculture has not been destroyed.

But if the form of the societies had changed little, the needs and wants of the people in many of those societies had changed a great deal. In Murdock's view, the Palauans had an eager desire to acquire western goods and to accept western ideas and modes of living. The Trukese wished to acquire material goods but to retain their own social organization and systems of authority. The Yapese wished to be left alone. This uneven dynamic for change was partially the chief consequence of fifty years of colonial administration. In the Marianas, to a lesser degree in Palau, and to a still lesser degree in the other islands, it was associated with the emergence of new occupational roles which were not based on rights to land through kinship.

As a result of coming under one administration, some contact between the societies had been established, though policemen were usually the only category of workers who spent time away from their societies in German times. The Japanese had set up inter-island athletic competitions which, as well as promoting contact between different societies, had provided some common activity for the competing groups within societies. The slogan "Palau for the Palauans" was one outcome of these competitions. Certainly no feelings of unity between erstwhile separate communities were engendered; rather, as this slogan would illustrate, the chief effect of this contact may have been to sharpen Micronesian awareness of regional differences.

United States Policy for Political Change

United States policies for political changes in Micronesia are described as evolutionary by the administration. The goal has been to establish a system which will allow Micronesians to take an increasing role in the decision-making processes through their own institutions augmented by those which are deemed necessary to promote development:

> The administration holds these (traditional sociopolitical) structures must form the basis of a natural evolutionary process of advancement . . . . . (hence) an attempt is made to encourage wise selection, adaptation and application of features of other political structures which will contribute to advancement (Trust Territory Administration Annual Report 1961-62: 14).

The administration established under American rule has been a centralized bureaucracy directed by Americans which reaches into village life. The limits on its downward penetration are self-imposed and involve a limitation on the application of civil law, and the acceptance of advice as to appropriate bureaucratic action from elected or appointed municipal councils. In the last half decade, the powers have been expanded to include the making of local rules but these have required the approval of the local bureaucracy. The established legal system is independent of the bureaucracy.

The municipal councils have boundaries which coincide with traditional social and political units with the exception of those in the Marshall islands which overlap into communities with other hereditary chieftains. They are small -- Truk for example had 39 municipalities in 1962 -- and they are recent -- ten having been created in the last five years. They express at the local level the policy of the administration which is to proceed in an "evolutionary" and gradual way. Their membership is partly elected and partly appointed to represent traditional chiefs. There is a movement to convert to a completely elected

membership upon the death of the present hereditary incumbents.

District legislatures, with more inclusive boundaries, and with a wholly elected voting membership, have been established gradually since 1953. Their functions originally included the raising of local taxes in the form of import taxes and the provision of elementary education. Since the formation of the central congress, the district legislatures depend upon the return of taxation levied in the district by the congress for their resources, and education financing and control has passed to the U.S. administration.

The most significant step toward establishing organizations which will provide minimum necessary conditions for state building was the creation in 1964 of a central, bicameral legislative body called the Congress of Micronesia. Recruitment to the organization is by universal franchise of voters over the age of 18. Candidates must be aged 25 and over. Although the electorates follow district lines, they incorporate and combine local social groups, thus exerting pressures toward less particularistic representation by the elected. The functions of the congress include rule making, extraction of resources by means of taxation, and distribution of resources, although these latter powers are reserved to revenue locally raised and exclude the United States grant. It is excluded from legislating so as to affect United States treaties, orders of the Secretary, Department of the Interior, the Bill of Rights of the Territory, and of applying a higher rate of taxation to citizens of the United States resident in Micronesia. We have noted above that the legislation has no executive relationship to the bureaucracy although it may make laws that pertain to it.

The consequences of this new structure for the development of unification appear to be uneven at different levels.[1] Although administrators and district legislatures in Truk and in the Marshalls felt that the American principle of setting up single-member electorates would act to promote a greater disunity than the then present boundaries, the principle was carried into effect and the districts were divided. A similar process of dividing municipalities was followed in the Marianas and the traditional Yapese empire was divided into two constituencies. In Ponape District the cultural affinity between the different groups was used as the basis for apportioning constituencies (Meller 1967: 459-463). Operating against this tendency to fragment traditional units, the overall effect of dividing Micronesia into 21 constituencies will provide fewer units than were present in the traditional systems. The provision of a locus with central authority can be expected to force legislators and their constituents to become oriented to Micronesian-wide issues at the same time that it may increase the rivalries which are based on individual groupings.

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[1] The apportionment of constituencies may be reviewed by the General Assembly in 1971.

The impact of the structure on emergent political parties has been to encourage those which are more gradualist and espouse policies which are favorable to the concept of a united Micronesia. In Palau, the Liberal Party which supports a separatist "Palau for the Palauans" policy, and in the Marianas, the Popular Party which supports the union of the Marianas with the territory of Guam, have each been disadvantaged electorally (Meller 1967).

The United Nations Trusteeship Council in the last half decade has exerted pressures for political change upon the American administration. U. N. policy has been to sharpen the awareness of both the American administration and the Micronesians as to the exact nature of the political alternatives implicit in the Trusteeship agreement.[1] In its view the alternatives are three. Micronesia may choose to request a form of political integration with the United States, either through becoming a county of the state of Hawaii or by becoming a Territory with Guam. This alternative is at present opposed by the U.N. unless it is demonstrated that the choice is made by Micronesians in full awareness of the legal and economic effects of inclusion in the United States. Micronesia may choose independence, realizing that it will be dependent heavily upon external financial assistance. Micronesia and the United States may develop some form of free association which will allow the long-range future of the Trust Territory to be determined. Above all, the U.N. emphasizes that the choice by Micronesia should be one which has been fully considered by mature and well-informed leadership. The U.N. therefore favors a delay in making final decisions until this condition is met.

In 1966 the Congress of Micronesia asked the United States to create a commission to consider Micronesia's future political status. In August, 1967, President Lyndon Johnson sought authority from the Congress of the United States to appoint a commission to prepare an expression of opinion on self-government by the Micronesian people. The expression of opinion is to be "as soon as possible, and not later than June 30, 1972".[2] The U.S. Congress has not established this commission, but the Micronesian Congress has established its own commission to report on the future status of the Territory.

The decision by Micronesians and the United States among the options available to Micronesians is clearly the most critical decision in Micronesia's immediate political future. A target date for the decision has been determined by the United States. It is the present intention of the U.S. administration in Micronesia that the form of expression of Micronesian opinion will be by plebiscite.

The type of decisions which now lie immediately before the Micronesian political system, the fact that the decisions are to involve

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[1] Report of the United Nations Visiting Mission to the Trust Territory of the Pacific Islands, to the Trusteeship Council, 1964.

[2] Joint Resolution Regarding the Status of the Trust Territory of the Pacific Islands. Press release, Saipan, 1967.

all of the people of the Territory on the ideal basis that the vote of each is equal, and the fact that there is a centralized political forum, all indicate just how revolutionary, rather than evolutionary, the political changes have been, particularly in the last decade. The problems posed by the political growth in the present and in the future are those of promoting the type of revolutionary changes which will allow Micronesia to exercise responsible choices about its future and be viable as part of a modern state, in free association with a modern state, or as an independent self-governing state. Each of these political statuses would require a higher degree of effectiveness of Micronesian participation in political processes than now exists.

The Political Future

What types of problems are posed by tasks of the present and immediate future of Micronesia? The task of planning requires some conception of these problems and of the likely pattern of growth which lies ahead. Comparative analysis of empirical data derived from case histories in political growth has yielded several classes of inferences which can assist us to arrive at these conceptions. Since the inferences are derived from empirical cases which have occurred in the past and which in some senses are each unique, their validity for Micronesia now and in the future must rest on logical analysis of the dynamics of Micronesian conditions.

One class of inferences includes those which have led to the construction of political system models which specify the functions necessary for any political system operating at the level of a unified polity. Inferences can also be made to form propositions as to the nature of the functions necessary for growth in the system, propositions in the form that a given function must be carried out if other functions are to follow. Thirdly, hypotheses can be derived as to the variables or conditions which must be present to support these essential functions.

One set of propositions has been developed by G. A. Almond and G. B. Powell (1966). The functional requisites of a political system are conceived of as the power or capacity to carry out the following activities:

a) the extraction of resources needed to support the system from outside and inside the polity,
b) the formulation and enforcement of rules within the society,
c) the creation and distribution of material and non-material rewards,
d) the creation of effective symbols, and
e) functional responses to the demands of members of the polity.

Growth in a political system is an increase in the capacity of the system to carry out these functions. Since the functions are interdependent, an increase in the level of capability can follow from an increase in the level of any function. The responsiveness of the system to demands made upon it and its capacity to create and distribute rewards, however, depend upon a prior increase in the system's capacity to extract material and non-material resources from its environment and its capacity to regulate the society. These relationships among the functions support the hypothesis that there are necessary conditions for growth, and among them, increases in the resources and power must occur first. The inferences, then, lead to an explicit strategy for political growth.

The variables which directly affect the growth of these capabilities are located in a number of structures in the society. The composition and the development orientation of the politically active elites provide a vital direction to the capability and growth strategy of the system. The material resources provided by the internal and external economic systems determine the levels of the extractive and distributive capacities. The institutional framework, particularly the skill and values of those who fill roles in the bureaucracy, is especially germane to the regulative and responsive capabilities. Since the coercive power of all participatory political systems depends in the last analysis upon the support of the polity, and the coercive power of polities in the early stages of growth is relatively limited, all activities of the system depend upon the level of popular support which it is able to maintain.

C. E. Black (1966) has suggested, on the basis of his comparative analysis, that the historical conditions of colonialism and the functional conditions of the traditional sociopolitical structures give rise to particular sets of problems in the colonial and ex-colonial polities. Because these polities are made up of previously unintegrated societies, a major task for the political system is to promote integration at the new level. This task depends upon increases in the several capabilities made explicit in the model above, and upon the strategies of the leadership and growth in the support given the leadership by the population. The lack of viability of the traditional political structures means that the new central authority has to establish direct links with the population or with those traditional structures which can carry out functions for the central government. The weakness of the traditional institutions relative to the central authority means that conflicts in authority do not pose as serious a threat to central authority as they do in societies where traditional structures have high capabilities, but it does mean that the need to extend direct control to the population, and to obtain its direct support, places stress on the capacity of the central authority.

The analysis of the applicability of these propositions to the Micronesian case requires that we make certain prior assumptions about the goals for growth of the system and the timing of actions to reach these goals.

It follows from the goals accepted by the United States and established by the Trusteeship Agreement that Micronesia will move toward "self-government or independence as may be appropriate to the particular circumstances of the Trust Territory and its peoples and the freely expressed wishes of the people concerned."[1] It is clear that this expression of the wishes of Micronesian citizens will be sought in the next few years. The necessity for this expression means that the political system will need to respond with an articulation of its concerns for the future and a choice between alternatives.

From this point there are a number of alternatives. Should some form of territorial status, or incorporation into an existing state of the United States be offered to Micronesia, and be accepted through an expression of Micronesian opinion, the form of self-government which would follow would be limited in functions. Moreover, these goals allow for the possibility that the present boundaries of Micronesia could be modified in a number of ways. It is conceivable that the new boundaries could include the Territory of Guam or the state of Hawaii. Should territorial status be continued, the goal would be growth of the system toward a future point of self-determination, and a retention until that point of the goal of further integrating the present polity.

Goals which imply the replacement by indigenous institutions of the political functions at present performed by the Administering Authority would follow from a decision by the United States and Micronesians to accept the alternatives of autonomous self-government, with or without some special form of association with the United States. Such goals imply that there will be future acts of self-determination as between the range of alternatives between forms of self-government with association and self-government and independence. They would clearly require a sharply increased capacity in all parts of a Micronesian political system within the present geographical boundaries.

A third set of implications for growth in the political system would follow if an expression of Micronesian opinion chose the alternative of self-government and independence as an immediate goal and this goal were to be accepted by the United States. This goal implies a more rapid movement toward self-sufficiency in the political, economic, and social resources of Micronesia.

The separate probability that each of these different goals will emerge from the aggregation of Micronesian, U. S., and U. N. views in the immediate future can be assessed only on the basis of subjective judgments.

The United Nations is clearly opposed to any form of incorporation into the United States or its territories until there have been

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[1] Joint Resolution of the Senate and House of Representatives of the United States of America. Reprinted in Stanford Research Institute, Planning for Education and Manpower in Micronesia. Menlo Park: Stanford Research Institute, December 1967, p. 195.

further attempts to unify Micronesia, and until the Micronesian people are fully aware of the range of alternatives which lies before them:

> A special responsibility rests on the trusteeship system to insure that the choice (of future political alternatives) is a fully considered one. Self-determination now would come at a high point of American aid and would almost certainly result in an option for integration with the U. S. or with Guam (Report of the U. N. Visiting Mission 1964, Ch. VI).

Nevertheless, a strong expression of Micronesian opinion favorable to some form of incorporation in the early 1970's could lead to the acceptance of this goal should the view, or the influence of the United Nations on trusteeship matters change from that of the mid-1960's.

The alternative of self-government and independence as an immediate goal can be assessed against a number of factors. At this juncture, there is no expression of this view in any of the localized political parties within Micronesia, nor in any organized group of the political elite who advance this policy. There has been no statement by the United States that it would continue its present level of assistance to Micronesia should this alternative be chosen, nor any American pronouncement that they would favor this alternative. It is United States policy to commence a program of intensified expenditure in Micronesia, particularly in the field of the provision of transportation and communication facilities within and between the various districts; this increased expenditure is planned to take place over the next few years. Each of these factors would seem to decrease the probability that Micronesians and the United States would move toward this alternative in the immediate future.

Given the assumption that both the views and influence of the United Nations remain constant over the next five years, the probability increases that there will be further exercises in forms of self-determination by the Micronesian polity to follow the initial expression of opinion. It follows from American acceptance of United Nations policy that these choices will include forms of autonomous self-government as available options. The set of goals with the highest probability in the 1970's is that which is associated with further expressions of opinion on the political future within the range of alternatives provided by the possibilities of self-government with or without special forms of association with the United States.

On the basis of these considerations we shall adopt as a working hypothesis the view that Micronesia's future is most likely to require the Micronesian people and political system to make a series of choices as Micronesia moves toward self-determination, and that self-determination is most likely to mean a high degree of autonomous self-government. If some form of early incorporation into existing political

units does become the adopted policy, this working hypothesis will place a higher emphasis than is necessary upon the goals of unification and a high level of autonomy. If early self-government as an independent polity becomes the accepted policy, the working hypothesis will underestimate the urgency of the conditions necessary to this political status. Clearly, the availability of these several options and the present uncertainty of the political future demand that planning related to the future will need to be continuously adjusted as policies are defined.

The relationships can now be drawn between this hypothesis and the propositions as to the necessary conditions for political growth which we have spelled out above, together with the general requirements which these relationships impose upon the education system.

The present capacity of the Micronesian political system to extract resources from within Micronesia is very low. Increases in this capacity will depend upon the growth of the Micronesian economy and upon the stability of the expectation level of the people. While this level varies from island group to island group, there is a "rising level of expectation" throughout the islands. Rapid growth in the productive sector of the economy depends upon a prior heavy economic investment in a transport and facilities infrastructure, investments in efforts to increase agricultural productivity, and future political decisions which will affect the existing land tenure system and the conditions under which capital from outside will operate.

Micronesia is at present dependent upon external assistance from the United States. Its chief resources are its status as a Trusteeship under United States administration and its strategic position as an island umbrella over vast areas of the Pacific Ocean. The value of its location depends in part upon a United States assessment of its worth rather than upon its independent value to Micronesians. Its location, however, between the East and the West and its historical importance to Japan before the Second World War indicate that Micronesia may be able to use its location as a basis for the extraction of future resources from nations other than the United States should it wish.

The two major conditions for increased material capacity, therefore, are a political strategy which will promote economic growth and the growth of a realization by political leadership of the network of international relationships which are possible on the basis of Micronesia's geographical and strategic location. The population as a whole, but particularly the political leadership, needs to be appraised of the relationship between an increase in the resources available to the government, the level of demand on it, and the relationship Micronesia forges with other nations.

The development of an effective strategy places demands upon Micronesian leadership to formulate and win support for a wide range of policies which reach into the fabric of the society. Policies for growth will involve questions of the importation of capital and labor, of

changes in the system of land tenure, and as to the levels of social change consequent upon economic policy which are desired by Micronesians. Here we can agree with Black's proposition that the generation and consolidation of a leadership capable of grappling with these complex issues is the primary need in political growth. High-level formal education, in-service education for important civil servants, programs for the participants in emerging political parties, and the spread of information through means which will reach the population at large will all be necessary to generate and support a leadership capable of these functions.

In very broad terms, the new Micronesian political systems at the central and local levels are transitional with respect to their functions of formulating and enforcing laws. The traditional functions of the chiefs whose powers were based upon hereditary rights to land and their membership of superior clans are being transferred to elected politicians whose influence is increasingly based upon their status in new prestigous roles. Advice to the rule makers is being rendered by bureaucrats and members of political parties, and the rules are being enforced by courts of law and a police force. The transfer of authority from the Trust Territory administration to the elected Congress and to Micronesian administrators is a bare beginning in the transition to autonomous self-government. The speed of this transition depends upon the growth of the capability of Micronesians in the roles of their emerging legislature, administration, legal systems, and the growth of support for these throughout the entire polity.

The most salient aspect of this capability from the perspective of the United States administration is the technical skills of the occupants of these institutions. Their need for this skill calls for intensive instructional experience for the present occupants by means of formal and informal education and the experience which comes from more demanding roles. For those whose formal education is not yet complete, it means providing those forms of tertiary education which are carefully selected to prepare for policy formulation and skilled professional roles.

The more demanding aspect of these new roles, however, is that the decision-making processes must be oriented to goals and methods which are appropriate for the total Micronesian society and which will be supported by the diverse locally oriented societies which constitute the polity. At present, the views of some interest groups have been antithetic to the goal of a unified polity, as we have noted above. This capability will rest upon the growth of national sentiments, an awareness of national problems, and an awareness of cultural similarity throughout the population.

The patterns of isolation or conflict in traditional society and the cultural values which gave rise to a kin-based ethnocentrism constitute some of the obstacles to this growth. The uneven change in Micronesia and the reversals of direction which have been associated

with it have led to differences in local goals. Moreover, the colonial experience has done little to promote the contact of members of the major societies. Even under the recent United States administration, the policy has been to localize the roles for Micronesians in the administrative and social development institutions. Few Micronesians have been able to take up roles which are fully independent of their participation in kin-oriented groups, and still fewer have lived and worked in societies other than their own.[1]

The present function of the Congress of Micronesia is limited with respect to the legislation it may enact and with respect to the allocation of locally raised funds. Its powers can be expected to extend to the distribution of the development grants made by the United States. The power of the Congress of Micronesia to make allocations of these funds between the local groups will increase the intensity of interaction of the societies, and force the political system to cooperate and establish common goals and the polity to recognize them. Concurrently it will increase the degree of competition and conflict of interest between them on the basis of the local societies which form the predominant electoral base. This competition would seem likely to increase as the role of the political system changes from a distribution of revenues provided by the United States to the raising and re-distribution of taxation upon Micronesians.[2] Although the timing of this change depends upon the uncertain direction of political growth, its inevitability is inherent in the concept of a high degree of autonomy for Micronesia. These distributive and re-distributive functions will increase the significance of the acceptance of common goals by the population for effective rule-making functions by the political system. Indeed, they may be the necessary condition by which the political leaders can maintain legitimacy and some degree of stability.

The task of effective rule making, from this perspective, is but an aspect of the task of developing a much greater degree of political, economic, and social integration within Micronesia. An important means to this end is the provision of roles for Micronesians which are separated from a kinship base and are located in the new occupations. These roles should be associated with the geographic mobility which will intensify contact and the recognition of common goals and similarity between members of different societies.

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[1] As we note below with respect to the development of career roles for teachers, almost without exception the present Micronesian teachers are appointed to work in their own island society.

[2] The divisiveness of the processes inherent in the practice of modern electoral politics by societies in which orientations are based on locality is documented by Geertz (1963).

The task for education, in turn, is to promote the skills which will make these roles viable. The central concept here is education for career roles. Because mobile career roles are tenable only for those with the skill which provides for an income independent of the locality in which the person works, a level of skill is implied. The forms of education germane to this task are those which will upgrade the levels of skill in the present Micronesian work force, and those which will provide increasing numbers of Micronesian students with secondary and tertiary education. Educational policies will need to be matched by systems of incentives to encourage mobility and career orientation.

Another significant means to facilitate integration is the development and use of common languages through education while at the same time providing a place for the traditional languages. Policy decisions will be necessary here as between alternatives of encouraging the use of Japanese by the older generations or the intensification of incentives for them to learn English. But for the generation still at school, the task is to establish at least a ready fluency in spoken English. Efforts in this direction will promote the vertical and horizontal flow of communication throughout the political system and, particularly, enable national political leadership to communicate directly with the population at large.

The uneven access to wealth and power within the traditional social structures of Micronesian societies and the characteristics of the uneven orientations to the rate and type of change which is presently desirable pose problems for the growth of integration at the national level. Although U. S. policy has established an equality of representation at the Congress level by means of the principle of one-man:one-vote, an unequal access to positions of responsibility in the bureaucracy follows from the markedly uneven spread of education and economic growth. Differences in land tenure between the Marianas and the other islands alone provide for different participation in emerging entrepreneurial roles. Also, the population distribution between the societies does not give rise to a single dominant political grouping, but rather to a hierarchy of localized groups.[1] It may follow that competition for leadership among a number of somewhat unequal but not markedly dominant-subordinate groups will provide additional stress upon unification. It is important, therefore, that the degree of equality of access to the roles of direct political leadership be underpinned by an evenness in access to roles in the emergent professional, administrative, skilled, and entrepreneurial groups. Educationally, this need requires that the marked inequalities of access to and passage through the education system in the different island societies be redressed in the immediate future.

If, as we have assumed, the immediate political future in Micronesia will require the polity to exercise a series of difficult

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[1] Though the populations of the districts do not have an absolute correspondence to a local political interest group, they are indicative of them. The populations are Yap, 6,293; Marianas, 10,275; Palau, 10,628; Marshalls, 18,205; Ponape, 18,293; Truk, 24,521 (Miller 1967).

choices between alternatives, the burden of responsibility will fall upon those who are of voting age. Preparation for responsible choices will have to be carried out through the means of contact between adults afforded by the mass media communication systems, adult political education, and the informal processes within interest and occupational groupings. Forms of adult political education which provide for the participation of leadership from the non-traditional, traditional, and non-localized structures must, therefore, have a high priority in the total educational effort.

The educational tasks which follow from the tasks of political growth based on the assumption that the Micronesian polity will be engaged in a series of acts of self-determination and will move toward a high degree of political autonomy can be summarized in the following several propositions:

1. The development of a leadership capable of defining strategies for political, economic, and social growth is a primary task of an education program. It calls for increasing access to a wide range of secondary and tertiary education which will equip Micronesians to make responsible judgments on aspects of national and international policies, and for intensified political and technical education for those Micronesians who are presently in roles of responsibility.

2. The development of Micronesia-wide orientations among the population whose occupational roles are not located in traditional structures must be accelerated by secondary and tertiary education and an incentive system which will facilitate career roles and mobility throughout Micronesia.

3. Common orientations will be facilitated by the development of the use of common languages, and particularly by providing both formal and informal education in English.

4. The equality of access of the population to political representation at the central level must be underpinned by greater equality of access to the wealth and status associated with emerging career roles by a system of education which redresses present inequalities of access to the formal school system and to adult education.

5. Forms of political education for the adult population must have a high priority in the total educational effort.

CHAPTER III

ECONOMIC GROWTH AND CHANGE IN MICRONESIA

The Economic Background

The history of economic growth and change in Micronesia is woven into the pattern of successive colonial ventures in the archipelago. During the 1800's, the whaling and copra trade resulted in increasing outside contact with the islands. During this period the copra trade was expanded and became, before the close of the century, a major activity with strong competition developing among the traders of different nations. German traders achieved a position of relative dominance throughout the Carolines and Marshalls during the last two decades of the 19th century. This dominance was further increased in 1885 when the Marshalls became a German protectorate, and in 1899 when the Germans bought from Spain control of all the Micronesian islands except Guam (which became a territory of the United States). German administration continued for fifteen years. During this period, a vigorous program of coconut planting and copra production was instituted.

With the defeat of Germany in 1918, the League of Nations gave Japan a mandate over the Micronesian islands. This situation was to continue until the closing years of the Second World War when American forces occupied the territory. It was during the period of Japanese administration that Micronesia experienced its most extensive and complete economic growth. At the risk of oversimplifying, it may be said that until the Japanese mandate Micronesian economic growth was limited to the expansion of copra production and whaling. Whaling itself had declined toward the close of the 19th century as the supply of whales became depleted and as substitutes for whale oil became available. In sharp contrast, Japan embarked upon a policy of expanded colonialization and resource exploitation. Agricultural, manufacturing, and processing industries were established. In-shore fisheries were greatly expanded and off-shore fisheries became a major Micronesian industry. We have already noted that Micronesian participation in this economic growth was mostly peripheral. Symptomatic of the level of Micronesian participation is the fact that, by the time of the Pearl Harbor attack in 1941, Japanese, Okinawan, and other immigrants in Micronesia outnumbered the local people on some islands by a ratio of approximately three or four to one; on some islands and in the major population centers this figure rose to as much as ten to one. Although the Japanese succeeded in greatly expanding the economic base of Micronesia, they did so without extensive Micronesian participation.

Characteristic of this economic expansion was its unevenness from district to district. The Marianas and Palau were most favored by

the Japanese economic enterprise, with other districts experiencing little growth in comparison. The following table illustrates this unevenness of economic growth.

TABLE 1

Production of Principal Crops, Excluding Coconuts - 1937
(All figures reported in short tons)

Crops	Ponape	Truk	Yap	Palau	Saipan	Marshalls
Cereals	42	0	1	2	74	NA
Sweet Potatoes	276	28	959	653	910	NA
Pineapple	9	38	27	1,263	21	NA
Bananas	583	79	7	296	227	NA
Oranges	10	0	8	21	14	NA
Other Fruit	104	4	3	484	201	NA
Sugar Cane	55	0	0	32	583,180	NA
Cotton	13	0	3	0	32	NA
Coffee	0	0	0	1	290	NA
TOTAL	1,092	149	1,008	2,752	584,949	NA

(Adapted from Civil Affairs Guide - Agriculture in the Japanese Mandated Islands - OPNAV 13-17. Sept. 1944.)

When, toward the close of World War II, the American Armed Forces moved the battle to the Japanese-held Micronesian islands, the Japanese-built economy of the islands collapsed. Physical plants were destroyed; infrastructure and facilities were bombed. Almost overnight, Micronesia returned to its pre-war subsistence economy. The fact that Micronesians had participated in the modern economy of their islands between the wars in only slight and marginal ways now meant in practical terms that, even had the physical plant of Japanese industry in Micronesia remained intact after the war, the skilled manpower to manage it departed with the Japanese. Figures that are available for livestock (See Table 2) are indicative of the change that the war brought to the economy of Micronesia. Yet, as has already been noted, the economic efforts of the Japanese left few permanent changes in Micronesian societies. For the large influx of Japanese and Okinawan personnel during the almost thirty years of Japanese administration had kept Micronesians out of the mainstream of economic developments in their land and had allowed the basic structures of Micronesian societies to remain intact.

TABLE 2

Livestock Numbers

	Year	Marianas	Yap and Palau	Truk	Ponape	Marshalls
Swine	Maximum Pre-war	24,070	6,400	7,000	7,000	3,200
	1946	2,800	600	550	2,650	500
	1965	1,380	3,700	3,100	6,000	5,100
Cattle	Maximum Pre-war	14,580	650	250	800	NA
	1946	3,100	10	3	100	NA
	1965	4,080	115	6	400	NA
Goats	Maximum Pre-war	8,800	1,000	850	1,400	12
	1946	550	30	35	300	NA
	1965	1,150	502	980	600	NA
Chickens	Maximum Pre-war	260,600	30,000	12,000	11,000	13,000
	1946	21,000	2,500	2,000	5,000	2,500
	1965	11,500	11,500	16,000	22,000	49,000
Ducks	Maximum Pre-war	8,600	1,000	1,700	150	800
	1946	400	10	115	40	45
	1965	180	251	5	500	1,200

(Adopted from the Nathan Report, p. 137.)

In 1946, the United States Commercial Company employed several teams of anthropologists and economists to study needs in Micronesia and to propose programs and guidelines for rehabilitation. Several volumes resulted from this coordinated study. These suggested programs to re-create some of the kinds of industries and enterprises which had existed under the Japanese administration. In 1947, the islands passed officially to United States administration when Micronesia was made a Trusteeship of the U. S. From 1947 to 1951 the islands were administered by the United States Navy. After 1951, the islands passed to the Trust Territory Government, attached to the United States Department of the Interior. Almost immediately, however, the Marianas were transferred back to Navy administration where they were to remain until 1962.

Until 1962 Micronesia was administered by the Trust Territory Government with a total expenditure ceiling of 6.5 million dollars annually. In actual fact the ceiling was never appropriated and the territory was administered for fifteen years on yearly budgets of approximately four million dollars. In sharp contrast to this, the Navy administration continued its activities in the Marianas, and especially on Saipan. Figures for Navy expenditures in this area do not appear to be available, but it is clear that the separate administration of the Marianas by the United States Navy allowed for a concentration of American capital, products, and facilities in the Marianas which was unknown in the rest of the territory. The activities of the Navy provided greater job and income opportunities and more public services in the Marianas, particularly on Saipan, than were available elsewhere in Micronesia. In effect, then, the Marianas continued to exceed the rest of Micronesia in purely economic development terms, and to enjoy the same position of relative superiority that it had enjoyed under the Japanese administration.

With the exception of the district centers, where the American administration carried out its operations, and with the exception of the Marianas which remained under Navy administration, there was little economic change in Micronesia during the first fifteen years of American administration. In the district centers, government jobs were created and Micronesians were recruited into many of these. In evaluating the efforts of the Trust Territory administration to 1962, the Nathan report states:

> The limited resources of the Trust Territory Government had to be spread thin, yet some progress was made. The copra trade was further expanded; there was some success in helping local residents to increase their agricultural production for local consumption; some trading cooperatives were established . . .; a few Micronesians were provided with secondary and some college education. . . (Nathan Report 1966: 38).

In general, however, the Trust Territory Government operated on a housekeeping basis and without any overall plan for the economic future of Micronesia. One observer has stated that the reason for the American position during these years (years when millions of American dollars were being spent on rebuilding post-war Europe) was that

> . . . . . the ruling philosophy of the post-war era was: The Micronesians live in paradise. Please don't disturb (Boyer 1967: 721).

But whatever the reasons might be, there is no doubt but that Micronesia was neglected by the American administration, that economic measures were minimal, and that most Americans were unaware that development objectives of trusteeship even existed.

In 1962 the Marianas joined the rest of Micronesia when they were placed under the jurisdiction of the Trust Territory Government. In that same year there was a considerable increase in the annual budget maximum allotted to the territory -- up to 15 million dollars. In 1963 this was further increased to 17.5 million. The increased availability of capital resulted in an upsurge of public services. Schools, hospitals, and other buildings were constructed; some funds were expended for airfield construction, transportation facilities, and other public works. Despite this expansion in capital expenditure, the authors of the Nathan report lament that

> . . . previous personnel and performance standards were largely unchanged, and there was no effort to integrate, coordinate, and direct Trust Territory Government programs toward a unified objective. The . . . increase in the budget generally used for doing about three times as much of the same kinds of things, in the same general way . . . (Nathan Report 1966: 42).

What appears most striking in the history of the American Trusteeship in Micronesia in economic development terms is the fact that for almost twenty years the United States operated without giving any serious attention to the planning for economic development in the islands. At a time when the United States was involved in economic reconstruction programs in post-war Europe, Micronesia's economic development (an area for which America had been designated full responsibility by the United Nations) was largely neglected.

Micronesia's Economic Development Plan

In 1965 there emerged the first significant indication of American interest in the economic development of Micronesia. In that year the Department of the Interior contracted the services of Robert R. Nathan Associates of Washington and charged them with the task of preparing an economic development plan for the Territory. Their report was submitted in December of 1966. It is entitled "Economic Development Plan for Micronesia" and although there is as yet no indication as to whether the report will be accepted as the official economic development plan, it does appear that it will play a considerable role in the economic future of the Territory. The report reviews the economic history of Micronesia, recounting the facts that there was substantial economic development of the islands under the Japanese administration, but that under the American Trusteeship economic development has been largely neglected. The report states that economic development is possible and urges that it proceed rapidly and without further delay.

It is impossible, given the scope of this document, to review the Nathan report in close detail. But because the plan is central to the entire development issue, and because the recommendations of the Nathan Associates are likely to influence the future of Micronesia, it is necessary to deal with the more salient aspects of their report.

After an extensive review of Micronesia's economic base, the authors of the Nathan report admit that this base for economic development is quite limited. But they point out that there are areas which appear to hold considerable promise for economic development. In general, the limitations arise from the lack of natural resources; the land area is small -- if all the land area of all the islands in Micronesia were lumped together, the total area would be only about ten times the size of the District of Columbia or a little more than half the size of the state of Rhode Island. The agricultural and extractive capacities of Micronesia appear to be rather insignificant in terms of their contributions to economic growth. The great distances involved in carrying products to markets and the vast distances separating the islands themselves, although technologically surmountable, pose serious difficulties. In terms of manpower alone the economic potential picture is rather complicated. There are only some 90,000 Micronesians spread over the length and breadth of the territory. In evaluating the skills that these 90,000 people can offer to an expanded economy the Nathan report concludes that these are, at present, not considerable. This dearth of human skill is matched by a serious lack of presently available physical capital.

The report does point out areas where economic development is possible and offers a five-year plan for economic development. Viable economic enterprises are deemed possible in fishing, expanded copra production, small industries based on home crafts in carpentry and handicrafts, and tourism. Tourism is seen as a real source of economic development if transportation and infrastructure facilities are expanded

and if extensive modern facilities for tourists are constructed. Little expansion can occur, according to the report, unless there is a substantial introduction of both physical and human capital into Micronesia. In the words of the report,

> Unless much more capital and more capable and experienced management are introduced into the Trust Territory from outside, many otherwise feasible economic development projects will have to be foregone (Nathan Report 1966: 70).

The report sees a need to import not only high-level manpower (managers, professionals, etc.) but low-level manpower as well (farmers, fishermen, laborers).

The authors of the Nathan report recognize that with such a small population, the United States could easily support Micronesia indefinitely, raising the standard of living by simply subsidizing life on the islands. In very specific terms they note that if $1,500 were appropriated by the United States Congress for every citizen of Micronesia, the total amount would be less than one fifteenth of one per cent of the gross national product of the United States. This, however, would be inconsistent with the present stated economic goal of the United States in Micronesia -- that is, to make Micronesia a viable, self-supporting economic entity. The goal according to the Nathan report, is economic development at any cost, and the responsibility for such development rests with the United States government. This view is made explicit in the following statement:

> The basic choice between moving toward viability or toward perpetual dependency is one which must be made by the United States. The past centuries . . . have developed a conditioning which will insure that if the United States offers the alternative of high standards of living and much higher levels of public services through direct governmental actions, the Micronesians are not likely to refuse perpetual dependency (Nathan Report 1966: 85).

To achieve the goal of economic development, the report urges that there be some marked changes in the demographic composition of Micronesia. Specifically, the report urges that efforts be made and inducements provided to concentrate the presently widely dispersed population of Micronesia on a few of the larger islands where viable economic enterprises can be operated.

> Because of the very small and widely dispersed population, neither market-based nor labor-based activities of significant size can be anticipated without a considerable expansion and concentration of population (Nathan Report 1966: 77).

An additional impediment to economic development, according to the report, is the "existing pattern of land tenure and the lack of proper land management". It is made explicit that "land reform is the only ultimate solution". To achieve these changes it is recommended that services be extended only to the areas where population concentrations are deemed desirable. If this is done,

> Better schools, hospitals, water supply, electricity, and transportation and communication services will be enjoyed by more of the people. Even the development of sound political institutions and the modification of those traditions which impede economic development can proceed much more rapidly in the areas where populations are concentrated and where the people are far distant from each other (Nathan Report 1966: 97).

For Micronesians who elect not to follow the urgings of the Nathan report, those who choose not to respond to the "inducements", it is recommended that only "minimal public services be extended to them".

The report strongly states that if economic development is to be facilitated, the United States must establish and maintain an economic relationship with Micronesia. But the relationship cannot be limited to the economic sphere. It must be extended so that the United States can influence change in the values held by Micronesians. If economic development is to succeed, the newly established Congress of Micronesia must support the American program of development. But, the report continues, the members of the Congress must be given professional guidance and assistance so that the new political elite can deal responsibly with the complex problems now being faced by them. This guidance and assistance is necessary because

> New democratic political institutions have not yet been sufficiently developed to make it possible to forecast the attitudes the elected representatives will reveal or the kinds of legislative policies they will institute (Nathan Report 1966: 93).

In general terms, the Nathan report urges that economic development must occur, and that if it is to occur the Micronesians must learn the discipline, the system of rewards and punishments "on which every modern economy is based". Furthermore, the report states:

> Benevolent outsiders who may seek to help on non-economic grounds may well impede this growth process by undermining the needed discipline. The fact is that development is demanding and the benefits cannot be enjoyed without paying the costs (Nathan Report 1966: 110).

Economic change is seen by the authors of the report as a process of "muscle building". The report grants that

> The necessary "muscle building" for economic development requires the awakening of a philosophy among Micronesians which is in many ways foreign to their history and culture. Because of this, the process will . . . be . . . frustrating to many people. (But) failure to recognize the need for this "muscle building" process . . . will lead to . . . little or no solid progress in economic development (Nathan Report 1966: 111-112).

Regarding education, the authors of the report view it as the means through which these "economic muscles" will be built. Education will work to inculcate new values and attitudes which will facilitate the building of "democratic institutions" and a modern economy. In conclusion the Nathan report states:

> Generally, no program should be planned, no expenditure contemplated, no personnel hired, no policies established, no programs continuously carried on and no important decisions made, without assessing the economic development impact (Nathan Report 1966: 120).

At the outset, we pointed out that it would not be possible to demonstrate the scope of the Nathan report. In fairness to its authors, it must be noted that the report provides a sector-by-sector analysis of the present and potential Micronesian economy. But it must also be pointed out that we feel that if the above recommendations of the Nathan report are carried out, the people of Micronesia will know new and increasing frustrations. As an economic development plan, the Nathan report insists on physical resource development as the yardstick for Micronesia's economic development. Physical resource development is certainly necessary if economic development is to occur and if Micronesia is to develop a self-sustaining economy. But the authors of the Nathan report by implication see the Micronesians as non-essential in the process of economic growth. They make clear the fact that for the rapid type of growth which they recommend, Micronesians will not be available to fill even the jobs that will be created in the lower sectors of the economy; not only will it be necessary, if their report is acted upon, to introduce high-level manpower into Micronesia, it will also be necessary to import low-level manpower -- farmers, fishermen, tradesmen, etc.

Further, the report explicitly assumes that the Micronesians are not capable of deciding what course of change (if any) they wish to embark upon. The report sees no need to consider what Micronesians might want for themselves -- because the report further assumes that

Micronesians hold values and attitudes which must be changed before the process of development can even begin for them. In fact, evident in the Nathan report is a recognition of the fact that what the report recommends is unacceptable to the majority of the Micronesians.

> The necessary "muscle building" for economic development requires an awakening of a philosophy among Micronesians which is in many ways foreign to their history and culture. Because of this, the process will necessarily be slow and probably frustrating to many people. But if historical and cultural impediments are fully recognized and understood the difficulties and slowness of making progress can be at least partially overcome (Nathan Report 1966: 111).

Further, there is the additional assumption that Micronesian political leaders will be able to make "right decisions" if they are schooled and led by the American administration. The report does state that the Micronesians should be handled "with sensitivity" but the fundamental question, "sensitivity to what?", is left unanswered. To the authors of the Nathan report sensitivity cannot include a sensitivity to the culture and values of the people of Micronesia, to their traditions and social structures, for these are viewed as impeding the sin qua non for change in Micronesia -- economic development.

Given the recommendation that landholding patterns be reformed so that agricultural landholdings are placed in the hands of experienced and competent managers, together with the recommendation that labor -- and cheap surplus labor at that -- should be imported from such places as the Philippines, Okinawa, and Taiwan, the picture that the Nathan report provides becomes complex and troublesome. Indeed, if land reform leads to a loss of Micronesian ownership of productive landholdings in the islands, and if the importation of foreign labor leads to Micronesian dependence upon imported labor, economic development itself may lead the Micronesians to a state of perpetual economic dependency, and to social and political subjugation. In other words, self-determination and autonomy become lost through the process of economic development.

Moreover, the Nathan report states at the outset that it will provide "an awareness of realistic alternatives" (Nathan Report 1966: 9). The report, itself, however, does not provide alternatives. It provides for only one course of action -- the development of the physical resources of Micronesia -- and it provides for this in only one way -- through a closer economic association with the United States and through the injection of large quantities of American capital into Micronesia. Admittedly, there is recognition that the United States could subsidize every Micronesian without unduly straining American resources. This, however, is not a realistic alternative and is dismissed as such in the report. If there are economic alternatives available to Micronesia, the Nathan report does not provide them.

We know that foreign aid and capital investment in forms similar to foreign aid can constitute direct interference in the life style of an underdeveloped area. The issue which has been raised by the histories of colonialism and foreign aid is not so much that of what can be done and what cannot be done as it is the more abstract question of what ought to be done, by whom, how fast, and toward what end. In seeking greater efficiency for an underdeveloped area, in extolling the virtues of industrialization and in a rising gross national product, the proponent of development faces the danger of being drawn into an absolutist position, into justifying an end which he "knows" to be good. The Nathan report exemplifies this danger. A document which bears a striking similarity to the Nathan report and which is worth noting here deals with economic development in Thailand. In it, the author describes the charm of Thailand's people, the obvious harmony between peasant, nature, and religion, the happiness of the Thai. But still the writer continues to conclude that economic modernization must come to Thailand.

> The transition is sure to be painful, sure to be unsightly, and the psychological impact will affect almost all her citizens. Thailand, however, must endure all of this to get a better life (Morris 1963: 134).

Especially disturbing in the blueprint for development which is offered for Micronesia by the Nathan report is its conscious rejection of Micronesians from the decision-making process. In doing this, the authors have assumed the sort of absolutist position referred to above. If the authors of the Nathan report worked from any model, it would appear to have been the model of modern industrial civilization, with its technical evolution and intellectual drive. The implications of this model for less developed areas of the world, in general, and Micronesia in particular will be dealt with in the next section of this essay. Suffice it at present to say that the question of values -- and especially the values of persons from a technological civilization -- must be raised and analyzed.

Economic Alternatives

As was noted previously, the Nathan report promised to provide "alternatives" for the economic development of Micronesia, but failed to provide these alternatives. Extensive analysis would be required in order to determine whether alternatives are feasible for Micronesia, whether economic alternatives are more consistent with the wants of Micronesians. One set of functional propositions which provides an alternative model for the economic development of Micronesia arises from the comparative analysis study of Harbison and Myers (1964: 223). These authors stress the formation of human capital over the

development of physical capital. The fundamental position which they adopt is succinctly expressed by the Managing Director of the United Nations Special Fund:

> The underdeveloped countries need high-level manpower just as urgently as they need capital. Indeed, unless these countries are able to develop the required strategic human resources they cannot effectively absorb capital. Of all the resources required for economic development, high-talent manpower requires the longest "lead time" for its creation . . . The existence of such manpower, however, is essential if the countries are to achieve self-sustaining growth (Hoffman 1960: 35).

In other words, the position adopted is that development cannot occur and capital cannot be absorbed unless skilled manpower is available. Such manpower cannot be developed over the short term. Dams, factories, infrastructure can be constructed in a few years, and physical capital can be formed over a relatively short period, but human capital requires a longer lead time. Harbison and Myers urge that attention be focused on the formation of human capital and that, because of the longer lead time required, its formation should take precedence over the formation of physical capital.

Micronesia proves to be extremely elusive of categorization. In terms of the typology presented by Harbison and Myers, Micronesia yields a composite index of 31.4. This composite index is calculated by considering the arithmetic total of

> (1) enrollment at the second level of education as a percentage of the age group 15 to 19, adjusted for length of schooling, and (2) enrollment at the third level of education as a percentage of the age group, multiplied by a weight of 5 (Harbison and Myers 1964: 31-32).

This composite index places Micronesia between a Level II country (partially developed) and a Level III country (semi-advanced).

This categorization is probably far too high in that it results from the comparative recency of developments at the second and third levels of education and from the relatively small population of Micronesia. When other variables are considered (e.g. Micronesia's almost total dependence upon foreign middle- and high-level manpower; the limited economic base already described; the overwhelming percentage of Micronesians engaged in agriculture; and the fact that despite relatively high wages for Micronesians employed in the modern sector of the economy, the per capita income for all of Micronesia is less than $100 per annum), it appears that Micronesia is more accurately grouped with the Level I countries in the Harbison and Myers typology.

Harbison and Myers offer the proposition that the perspective planning period for development should involve ten to twenty years, a proposition consistent with the knowledge that it takes a longer lead time to form human capital than to form physical capital. In this connection, it should be recalled that the Nathan report offers Micronesia a five-year plan. Two further propositions which are of special interest to our analysis are offered by Harbison and Myers. These are:

a) Economic growth will depend upon expansion and improvement of agriculture, fishing, and forestry, and in some cases on the discovery and exploitation of natural resources as well. Large-scale industrialization is beyond the reach of the typical Level I country during this ten- to twenty-year period.

b) The most logical starting point is the formulation of a program of localization, since this is the area of greatest political consequence. In effect, this means the construction of a schedule for replacement of foreigners over a ten-year time span.

Both these propositions offer a marked departure from the recommendations arising from the physical capital model offered by the Nathan report. The second proposition, especially, is a radical departure from the present economic plan for Micronesia. In the present plan, it will be recalled, the importation of large numbers of foreign manpower at all levels of skill and training is recommended for Micronesia. In the Harbison and Myers typology, a quite radical localization program is recommended. But it is important to note that the replacement of foreign personnel is something that is recommended as part of a schedule which is to be enacted over a relatively lengthy time period -- ten years. The recommendation is consistent with the view Harbison and Myers take of the importance of the formation of human capital; if the formation of human capital is given primary importance, the very creation of that capital will allow for the scheduled replacement of foreign personnel.

In terms of educational needs, given the above typology, Harbison and Myers stress the need to provide education which will a) equip nations with the requisite skills and abilities so that the programs of localization will be feasible, b) expand educational facilities in the critical areas which will most rapidly yield the desired outputs, c) provide educational content which will emphasize the skills and abilities most likely to be required in the developing economy, and d) embark upon a program of adult education as a time-saving and cost-reducing method of enabling men and women to participate more fully in their country's development. In terms of the second point, Harbison and Myers stress that absolute priority should be given to second level

(secondary school) education. The rationale for this is threefold: 1) almost without exception, those who are to replace foreigners will need to be secondary school graduates; 2) the economic and political leaders for subsequent years will be the secondary school graduates of the next ten years; and 3) it will be impossible to develop a good primary educational system without substantial numbers of teachers who have a second level education.

In a strategy of human resource development, Harbison and Myers justifiably direct attention (item c in the preceding paragraph) to the content of education. The content of secondary education is vitally important. Extensive documentation exists of the folly of regarding secondary school solely as a means of university entrance and of building, in a developing educational system, a second level educational content designed almost exclusively to prepare students for university admission. Harbison and Myers note the need to design second level education to prepare not only for university entrance but also for entry into intermediate level work in teaching and in public and private establishments -- especially where training on the job can be provided. They recommend, therefore, that it would be wise to emphasize second level education with an optimal range of courses (i.e. teacher preparation, technical subjects, etc.) within a single school rather than to proliferate specialized institutions. Such a practice would reduce costs of staff, facilities and equipment.

Reference was made earlier in this essay to a plebiscite which will confront Micronesians with the political alternatives available to them. Because of the imminence of this plebiscite, the attention which Harbison and Myers give to the role of adult education in a Level I country takes on a special significance for Micronesia. Hopkins (1962) has pointed out that adult education has time-saving and cost-reducing properties that should render it particularly attractive to developing countries. But Hopkins is careful to point out that literacy itself is not to be considered the goal of adult education programs; literacy is a means or a tool rather than the end of adult education programs. Programs in adult education could include agricultural and cooperative extension work, fundamental education, and other organized programs to allow men and women to participate in the change and development of their society. Specifically, in the Micronesian case, adult education programs would appear to be of basic importance to the issue of the plebiscite and self-determination. Rather than excluding Micronesians from deciding upon their own future -- as was both implicit and explicit in the Nathan report -- the Harbison and Myers model views human capital as forming not only to fill positions in an expanding economy, but to engage in the process of decision-making itself.

The human resource development model of Harbison and Myers provides a very definite alternative to the physical capital model of the Nathan report. Two aspects of economic development are contained in the Nathan report:

(1) The immediate provision of physical infrastructure (roads, airfields, ports, bridges, etc.)

(2) The immediate development of capitalist private enterprise efforts in tourism, husbandry, fisheries, etc.

The human resource model has two quite different implications:

(1) Use of physical infrastructure expansion as a vehicle for the training of Micronesians. This may involve the importation of high-level manpower in order to bring about these developments, but it definitely involves the notion that such manpower be used to train Micronesians.

(2) The development of private enterprises may have to be delayed until Micronesians are available to participate at all levels in such enterprises. Specifically, the human resource implication is that non-Micronesian populations should not be imported in order to employ Micronesians purely as laborers.

By implication, also, the human resource model is in disagreement with the Nathan position that nothing should be done without assessing the economic development impact. This is not to suggest that the building of human resources is not premised on the assumption of a concomitant growth in physical capital. Indeed, nothing could be farther from the truth. But what it does imply is that no physical resource development would be contemplated without assessing the human resource availability or the potential for the development of human resources. In terms of basic assumptions, the human resource model is the converse of the model assumed by the Nathan report.

A further economic alternative which Micronesians might wish to explore is inextricably woven into the question of Micronesia's political future, and indeed would probably be premised on a Micronesian decision to "go it alone" by becoming an independent nation. This alternative would involve an assessment of the value of Micronesia's strategic position as an island umbrella around the Asian mainland. At present, it is impossible to predict the monetary worth of this strategic position. As has been pointed out above, this would depend largely upon a U.S. assessment of its worth. We have also pointed out, however, that its location between East and West and its historical importance to Japan in the Second World War indicate that Micronesia might be able to use its strategic location as a basis for extracting resources from the United States or from other nations should Micronesia opt for independent nation status. Economic development might, therefore, occur if Micronesia were to extract material resources from other nations in

return for arrangements which would permit utilization of its strategic location.

Because of the presently very limited capital resources of Micronesia, implementation of either the recommendations of the Nathan report or of the human resource model presented by Harbison and Myers would require that Micronesia extract large amounts of foreign capital. Under the present trusteeship arrangement, this capital can, in practical terms, come only from the United States. If, however, Micronesia were to opt for independence, and if it were able to use its location to extract capital from other nations, then it is conceivable that Micronesia would be able to select and finance its own development. Both of these conditionals are in the realm of the possible. How feasible they are cannot, at present, be determined. Indeed, it is probable that the feasibility of the second could only be known if the first became a reality -- that is, if Micronesia were to select independence and then to bargain from that position. But the fact remains that Micronesia's strategic location is a potential source of substantial extractive capability, and it forms another alternative to the course of development that is outlined by the Nathan report. It is interesting that the authors of the Nathan report make no mention of this as a realistic alternative (which it may not be) or even as a possible alternative (which it most certainly is).

In summary, this section began with an attempt to trace the course of economic change in Micronesia. The influence of various foreign powers has been evaluated throughout Micronesian history. We have noted that economic development in Micronesia has been uneven in two ways: it has been uneven across the four separate foreign administrations which Micronesia has known, and it has been uneven among the various sections of Micronesia itself. It was apparent that in comparison with their Japanese predecessors, the administration of the United States has provided little impetus for economic development of the islands. The recent efforts of the United States administration occupied most of our attention in this section; we noted the increased expenditures which have been allocated for Micronesia, and we especially noted the recent Economic Development Plan for Micronesia. Because the plan is likely to be instrumental in future developments in Micronesia, we reviewed the main assumptions and recommendations of the plan. In doing this we noted what we believe to be serious shortcomings and dangers in Micronesia's present development plan. We then pointed out alternatives available to Micronesia and analyzed them. Considerable attention was focused on the educational implications of the human resource development alternative offered by Harbison and Myers. Finally, and throughout this entire section, we discussed the reciprocal relationship between economic change and social change. In doing so, we have anticipated our next section which will deal specifically with prospects of social change and with a model for dealing with and implementing such social change.

CHAPTER IV

SOCIAL TRANSFORMATION: IMPLICATIONS FOR EDUCATION

The Social Background

In no sense is it possible to divorce social, political, economic, and educational aspects of a nation or of any human unit. The only value in separating social from political from economic processes is that it renders these more manageable for the purpose of analysis and allows for a certain heuristic value in understanding complex processes. But we must point out what is already obvious in the preceding discussions: each unit of analysis which we have chosen to deal with is part of a system which influences and is influenced by every other unit of analysis. We make no apology for dealing with each unit as a separate section of study; doing so has conceptual advantages as well as allowing our task to remain within manageable proportions.

There can be no doubt that modern industrial civilization has had a wide-ranging impact on the more "traditional" societies of the world. However, as Murdock (1948b) points out, despite such contact with western societies, much of Micronesia, except for the Marianas, still retains essentially aboriginal local cultures and a subsistence agriculture. The reason that Micronesia's cultures have remained essentially intact, we have suggested, may be due to the nature of contact with the influence of the west. With the exception of the Marianas, most Micronesians have been effectively excluded from western forces introduced into their area of the world. In addition, contact with western institutions has been extended over a long period of time, but for the most part it has not been intensive in character. Thus, Micronesian values and beliefs, culture and attitudes have remained functional in the Micronesian context. As we have also seen, however, the pressures for change are steadily increasing. Contact with western institutions and ways is intensifying. Micronesians are being confronted with a new, western-modeled political institution; additionally, they are being asked to determine their political future and to do so before June 30, 1972. Economically, the prospect that the Nathan report presents is that of a rapidly developing modern economic system, of a relatively sudden and quite imposing capital investment. Educationally, the goal of universal primary and secondary education has been set by the Trust Territory government. All of this indicates that, at present, the functional value of Micronesian culture is about to undergo a transformation; there is also a high probability that in five to ten years the statement by Murdock above will no longer be valid.

As Trustee of Micronesia, the United States is the agent of technological change. To be a conscious agent of change is one thing. But to be an unconscious agent of change is another issue and has its hazards. Needs may not be realistically seen. Methods may be random or uncertain. Disappointment and frustration may become part of the lives of both Micronesians and the Americans who are attempting to

implement change. The American administration may be an unconscious agent in that it may not be aware of the implications which its programs for change may have on Micronesian societies. The force of technological change in the lives of peoples not accustomed to it is succinctly expressed by Barbara Ward (1959: 87):

> The . . . impact of science and industry is one that involves a total transformation of all aspects of life -- not only for organization and technique, but of fundamental habits of thought and social behavior. You have only to consider the impact of this type of society upon people who have not yet moved beyond the simplest patterns of living and working to see that, without immense patience, understanding, and restraint, . . . the incoming (innovations) will annihilate the whole social apparatus of the backward local peoples.

Another statement by Barbara Ward is of relevance also (Ward 1962: 137-138):

> All the great revolutions of our contemporary world had their origins around the North Atlantic . . . Yet if you look at these Atlantic nations today they make the strange impression of not being particularly concerned with the revolutions they have wrought. Blindly, blunderingly, with immense impact and immense confusion, they are remaking the face of the earth. But can one say that the Western powers follow their course with any particular concern? Do they see them as direct projections of the Western way of life. . .?

In these two statements Ward offers three fundamental propositions on the subject of social transformation:

1. When western ways and institutions are introduced into a non-western area, the effect is pervasive, transforming not only organizations and technique, but the whole social apparatus.

2. The immense force of western ways and institutions is applied to non-western areas with a total insensitivity to the deleterious results which may follow.

3. If sensitivity exists -- if patience, understanding, and restraint are coupled with the introduction of forces of change -- then it may be possible to have social change without annihilating the whole social apparatus of the non-western people.

When we investigate present American activities in Micronesia, it is difficult to conclude that this type of sensitivity exists. We

have been led to the conclusion that, particularly in the last decade, political changes have been revolutionary rather than evolutionary. We have investigated the economic plan for Micronesia and have been impressed by the massive and immediate implications which it holds for the Micronesians, with the expansive disruption it may engender, and with its deliberate exclusion of Micronesians from deciding the direction, course, and rate of economic change. We have also been impressed with the very explicit statements in the Nathan report to the effect that the social apparatus of Micronesia is backward and must be annihilated. Finally, we must look at the present stated educational goals of the American administration of Micronesia. In the publication, "Statement of Objectives and Policies of the TTPI", Mr. W. R. Norwood, High Commissioner, states (1967: 18):

> It shall be the policy . . . to provide educational opportunities for all Micronesians so that they can develop their capacities to the maximum extent.

He goes on to say:

> . . . <u>it shall be the responsibility of the Government</u> of the Trust Territory of the Pacific Islands <u>to set educational standards</u> and to support an educational system which will enable Territory students to develop educationally <u>to a level comparable to United States standards</u> . . . (underscoring ours)

The assumptions implicit in the High Commissioner's statement are that only the United States is <u>capable</u> of offering what education Micronesians should have, and that the U.S. can provide a suitable education modeled on what exists in the United States. At present, the question is not so much the efficacy of an American education in Micronesia as it is a question of what effect this type of education is likely to have on Micronesian society. Social anthropologists who have studied the problems of culture change have called attention to the effects of "modern" schooling, usually to point to its disintegrating results on tribal communities and tribal cultures. Certain anthropologists, among them Dr. E. W. Smith and the late Professor Malinowski, have urged that "modern" schooling should not be wholly divorced from the cultural background of the area it serves. On the same subject, John Hanson (1965: 55) states:

> The use of skills, values and knowledge acquired through formal schooling will require a social situation which is stable enough for them to be employed. The creation of such a social situation appears to require new types of educational institutions we have not found necessary in our own situation and about which we know relatively

> little. If the educational faith is narrowly interpreted, and routinely implemented, it may be merely a soporific which delays the solution of fundamental problems until they will be even more difficult to solve. The important question at this juncture is whether education will prove sufficiently adaptable and imaginative in conception to render the service it might render in maintaining or creating a worthwhile society.

From a social and education perspective, Hanson stresses a point that is remarkably convergent with the view expressed by Harbison and Myers from a manpower development viewpoint. In both cases it is agreed that education must be socially fitted into "what exists". In both cases, also, it is agreed that to transplant wholesale the education of the west into a developing region is to create, rather than to solve, basic problems of development and change. It is noteworthy that the notion that education be made to serve the community and situation in which it is placed has been held not only by social scientists, but also by the head of state of a developing country. In his pamphlet, "Education for Self-Reliance", Julius K. Nyerere (1967: 28) states:

> The education provided by Tanzania for the students of Tanzania must serve the purposes of Tanzania. It must encourage the growth of the . . . values we aspire to. It must encourage the development of a . . . citizenry which relies upon itself for its own development, and which knows the advantages and the problems of cooperation. It must ensure that the educated know themselves to be an integral part of the nation. . .
>
> This is not only a matter of school organization and curriculum. Social values are formed by family, school, and society -- by the total environment in which a child develops. But it is no use our educational system stressing values and knowledge appropriate to the past or to citizens of other countries. . .

These statements call into serious question the assumptions made by the present American administration of Micronesia. Taken in conjunction with our previous analysis, it would appear that the present educational objective of the American administration augurs for increasing frustration and increasing social deterioration within Micronesia. This is not to suggest that the intent of the American administration is to change people's lives in deleterious ways; indeed, the American administration may be acting with the best of intentions. It does suggest, however, that the administration is working from a particular value position and that that value position demands investigation. We have already referred to a study by Morris in which the author's

value position was dramatically obvious. As a result of his study of aid activities in Thailand, Ronald C. Nairn has concluded that certain benefits can certainly be derived from specific aspects of western technology, including western education, but that this is a far cry from saying that anything western will bring a better life to peoples of developing areas. Nairn goes on to state that it is necessary for the west in general to examine its own value system (1966: 192):

> . . . to query whether it possessed a universal solution, good for all men at all times, a cure for basic human ills.

It is just this type of analysis which appears to be lacking in Micronesia, and it is this type of approach which appears to be urgently needed.

But how is this type of analysis to be made; against what background, and with what standards does the agent of change examine his value position? In The Dynamics of Culture Change, Professor Malinowski sets out certain scientific principles for the study of social change (cited in Read, 1964). He suggests that the interests and intentions of the promoters of change should be analyzed, as well as the processes and institutions by which social change is effected. This emphasis on intentions as well as on institutions is particularly important in the study of modern education as part of the process of social change. Margaret Read suggests that a culture-conflict model be used along the lines suggested by Malinowski. Specifically, Read suggests that in cases such as Micronesia two cultures are involved: a "dominant" culture which promotes change, and a "subordinate" culture which is affected by changes introduced by the dominant culture. Read suggests that the examination of the desires and institutions of one culture must be examined against the background of the desires and institutions of the other. Read concludes that (1964: 358):

> As Professor Malinowski suggested, the (indigenous peoples) also have their interests in and intentions regarding the changes which have been or are about to be introduced by the dominant culture, and this is particularly true in the field of education.

To embark upon such an analysis required that a fundamental assumption which we have pointed to in the present Trust Territory administration must be rejected and a new one substituted in its place. Consistent with the position of Malinowski and Read, the assumption that Micronesians are not in a position to determine "what is best for them" must be rejected. In its place it must be assumed that if any integrity is to be left to the individual or to the group, the right of choice must be honored, especially the right to reject or to modify a given program.

A Social Change Model

One conceptual model which appears adequate for the investigation of social change and of programs for social change is offered by Ward Goodenough. Fundamental to Goodenough's model is the culture conflict model offered by Read and Malinowski's proposition that intentions as well as institutions must be examined. Especially noteworthy in the Goodenough model is its potential utility for planning and decision making.

Looking at the history of development projects, Goodenough notes that many of these have been undertaken for the best of technical reasons and with the welfare of the community as the prime consideration, yet these have "too frequently been transformed into police actions" (Goodenough 1966: 43). The reason, he suggests, for this failure is that

> . . . a change agent and his clients do not usually want the same things or have the same view of the development situation and its requirements (Goodenough 1966: 49).

Further analyzing this situation, he suggests that

> Wants and needs can be usefully differentiated and employed as conceptual coordinates in analyzing human activities (Goodenough 1966: 51).

This is accomplished as follows: a "want" is defined as a "desired state of affairs", and a "need" as the "effective means for achieving and maintaining a given want". The different perspectives possible on the "wants" and "needs" for a given situation are potential sources of conflicts or of failure. Schematically, then, Goodenough offers us four views of any one given situation. There is the view of the outside agent of change as to what is desirable for a given situation, and there is his view of how best to achieve this desirable state of affairs. On the other hand, there is the view of those who will be involved in change as to what states of affairs are desirable, and their views of how desirable goals may be achieved.

This point of view is summarized as follows:

> . . . when an agent of change decides that an underdeveloped community has certain needs, he must be careful to make clear to himself what his points of reference are . . . An agent's assessment of local conditions, furthermore, may or may not coincide with that of his clients, and his wants for them may have little relation to their wants for themselves. This means that he

> and his clients will be able to agree as to what are the community's needs only insofar as they are regarding (1) their wants for the community, (2) their understanding of present conditions and how they differ from those wanted, and (3) what course of action is an effective means of transforming present conditions into those desired. Practically speaking, what a community <u>needs</u> for its development is not so much a matter of fact as a matter to be negotiated (Goodenough 1966: 57-58).

But no negotiation can occur, suggests Goodenough, unless there is a considerable degree of cooperative interaction between the parties involved, and unless each becomes "less ethnocentric than before" (Goodenough 1966: 40). Should cooperation not occur,

> . . . changes resulting from development efforts may have the effect of intensifying existing frustrations and even add new frustrations to them (Goodenough 1966: 141).

Although this analysis does not yield a set of goals for the planning of Micronesia's future, it does attach a fundamental importance to the method by which these goals can be determined. In looking at the question of social change in Micronesia, we have stressed a number of negative lessons which can be learned by regarding Micronesia as a case study. It has been suggested that the application of models and processes current in the United States to the Micronesian context is to indulge one's ethnocentrism. Models which take account of the results of comparative studies and which have been derived from the special conditions presented in the non-industrial world have been presented as providing more acceptable alternatives for planning the future of Micronesia. Most especially, these models insist that the desires of the Micronesians themselves must be made an integral part of any planning process.

This integration requires a high degree of interaction at all levels between the change agents and Micronesians. Further, it would seem to imply the need for a rapid increase in the number of Micronesians who act as change agents. As Goodenough has noted, this process is more a matter for negotiation than it is a matter of referring to proven, empirical evidence.

A further point emphasized by Goodenough involves the notion of identity and identity change. How an individual perceives himself and how that individual is perceived by others is, in sum, the concept of identity. Identity is rooted in the social order, and for the individual is derived from the social order. Ralph Linton and Eric Fromm have given emphasis to this concept. Linton describes it as the "status

personality", while Fromm defines it as the "social character". The importance of the concept is illustrated by Fromm (1949: 5):

> It is the function of the social character to shape the energies of the members of society in such a way that their behavior is not left to conscious decisions whether or not to follow the social pattern but that people want to act as they have to act and at the same time find gratification in action according to the requirements of the culture. In other words, the social character has the function of moulding human energy for the purpose of the functioning of a given society. (Underscoring Fromm's.)

It is, therefore, obvious that any change that affects the existing social order or the individual's ability to conduct himself in accordance with it must also affect his identity. Goodenough notes that

> Social change is likely to involve the very core of being, affecting things that help to shape even the "innermost self" (Goodenough 1966: 177).

Because concepts of development involve notions of helping people to achieve a new sense of identity, both individually and collectively,

> . . . what we understand of the process of identity change will help us understand. . . development as a process too (Goodenough 1966: 177).

Goodenough's concept of identity is central to any discussion of culture and personality. The survival of a society depends on the operation of its social system. If the roles defined by the social system are not effectively carried out, the functions of institutions become anachronistic and the society itself decays. Spiro (1961: 98) notes that

> The role . . . is the smallest unit of the social system; the operation of the social system, ultimately and most directly, depends on the proper performance of roles.

It is in the concept of role that personality and social systems interact. Members of a society will fulfill their roles in the social system because these roles have been transformed through socialization from "culturally stipulated" goals into "personally cathected" goals (after Erikson, 1950). The roles are performed because they are rewarding, because a personally valued goal is achieved in the discharge of the socially necessary goal.

The roles with which people are associated are in part their identity in a society. What is important is that the identity systems with which people work vary from society to society. Goodenough points out that certain features of identity are regarded as immutable in a culture while others are not. From the viewpoint of the change agent, cognizance should be taken of those features which are regarded as immutable. Mason has noted this problem in his study of the former inhabitants of the island of Bikini in the Marshalls. When the United States settled upon Bikini as a site for the testing of a nuclear bomb, the Bikini islanders were forced to move from their island home and were resettled on the island of Kili. Their new home offered resources that differed markedly from those of Bikini. At the same time, the Bikini people were placed in much closer contact with other Marshallese to whom they have traditionally felt somewhat inferior. Mason's study (1958: 46) concludes that

> If they can learn to think of themselves as Marshallese, not as ex-Bikinians, they should find it easier to dispel some of their present anxieties and to seek more objectively the solutions to those problems which remain from a decade of having to adapt a traditional way of life to a strange physical and social environment.

The Bikini example illustrates the idea that certain features of identity are immutable and fixed in the established social order, becoming anachronistic when forces from without change a community's circumstances. With regard to identity change, Goodenough cautions:

> To overcome a lifelong view of oneself so as to be free to make new adjustments is exceedingly difficult. The frequent disintegration of men after retirement in our society, where occupation is so important a feature of identity, is a familiar case in point. The demoralization of the Sioux Indians as warriors and hunters deprived first of their weapons and later of their paddles is a matter of record. To help people become free of a view of themselves that they regard as unalterable required much patience. The new self-image may come only as a gradual awakening (1966: 186).

The notion of identity provides us with some important additional criteria in considerations of social change. In the first place, it urges on us considerations not only of where a given society falls according to certain economic development criteria, but also what identities exist and which of these are viewed as immutable. Again, to quote Goodenough (1966: 211):

> Intelligent planning for . . . development must obviously concern itself with where the clients' identifications currently lie, the nature of the values they see embodied in their important reference figures, and where the development agents and their values are likely to fit into them.

What follows from this is that the way members of an underdeveloped community look upon a change agent and the community he represents as possible models and judges for themselves is crucial to the achievement of cooperation in any development program. If models are to be presented, these must be such that they are viewed as desirable; they must lead people to want to re-define their roles and to assume a new identity in their society. In other words, regardless of the point from which a desire for social change emanates, new roles must be seen as desirable by members of the "subordinate culture".

> The problem that faces development agents . . . is to find ways of stimulating in others a desire for change in such a way that the desire is theirs independent of further prompting from outside (Goodenough 1966: 219).

Inherent in the process of stimulating others to desire change is the need to provide new criteria for evaluation -- including evaluation of self as well as evaluation of institutions. The industrial revolution and the extension of colonialism has had the effect of forcing people to learn new criteria of looking at themselves. Education, also, has had a similar effect. In planning education, consideration should be given to the question of how best to provide individuals with experiences and demonstrations which will afford them the criteria with which to evaluate themselves as well as whatever innovations or political alternatives are proposed. Most important to this additional aspect of Goodenough's thesis is that change agents must be aware of the pervasive effect of social change and of the social identity of the persons with whom they are dealing. Again, this argues for more and more Micronesians to be brought into the role of change agents as bureaucrats, educators, and entrepreneurs.

The above analysis suggests that Goodenough's concepts of "wants and needs" and "identity" should be extended to the discussion and/or planning of change in Micronesia. The "wants" or desired states of affairs in this case involve a recognition of the necessity for including social and cultural considerations in planning for change -- which means considering the "wants and needs" of the Micronesians from the Micronesian perspective, including concepts of identity regarded as immutable. In this case, the "needs" involve posing the fundamental questions and searching for answers to them. Fundamental questions of this nature would involve an investigation of the existing boundaries

and inter-relationships of subcultures within Micronesian society. With respect to education and political change, the central relationships which require explication and investigation are those between education and the emergence, characteristics, and legitimacy of various forms of leadership. This will include the orientation of Micronesian youths and adults toward their existing social structures and the traditional leadership pattern, if the identities of the present are to have continuity with the past, and the problem of instability is not to be fraught with tensions derived from marked discontinuities stemming from the political changes.

There is also a manpower aspect to this task of development. In political terms it involves specifying the numerical need for leadership across the organizations of government. Just as important, however, is an aspect of orientation to change throughout the society. From a specific educational perspective, the former will involve an investigation to locate the major foci from which leadership will emerge, and those from which it may emerge, and the definition of appropriate forms of education. One focus is obviously the system of formal education, and the motivations and values of the students and teachers who interact within it, in accordance with their previous socialization experiences. Analysis of this system will require examination of the pattern of access to schooling, its distribution and the location of secondary and tertiary studies. The curriculum will need examination to reveal its manifest content of skills, traditional and modern values, and its orientation to the future and past sociopolitical circumstances. The definition of the dynamic features of the present school culture is to be found in the orientations of the present generation of students and teachers. Expectations of both students and teachers regarding students' future occupational and geographical mobility will provide insight into important dimensions across different levels of schooling.

CHAPTER V

PRIORITIES DERIVED FROM ANALYSIS OF DEVELOPMENTAL NEEDS

In terms of our social change criteria, there are immediate applications of our previous analysis to educational structures and to decision-making processes. If planning for the future of Micronesia is to grant any integrity to those for whom decisions and plans are made, it is essential that the "subordinate culture" be consulted in these plans -- the right of choice must be honored, especially the right to modify or reject a given program. Goodenough's model for constructive change suggests a method for making decisions -- a method which can be advantageously applied both to the goals of educational programs and to the actions which will need to be taken if those goals are to be achieved. The model requires that at all levels of the formulation of an educational program,

1. There must be interaction and negotiation between the expatriate change agents and Micronesians. Such interaction must be applied to both the formulation of policy and to the formulation of programs.

2. In the Micronesian case, there needs to be a rapid increase in the number of Micronesians in the role of change agents.

3. A system of communication and a system of decision-making must be developed which will apply to the education process. Such systems should apply to the interaction between schools and the communities they serve, to the schools and the students, etc.

4. These systems require that appropriate decision-making structures exist at all levels. But more importantly they require acceptance of the proposition that Micronesian values and aspirations should guide all action plans.

In other words, the first implication to be derived from our analysis is that Micronesian wants and needs must be set into the goals of educational planning and into the process of planning for these goals.

This type of educational planning involves a somewhat radical departure from the process of educational planning usually found in developing areas. In this connection, it must be noted that educational planning as we have discussed it is a quite recent phenomenon. In the past, social investigators have concentrated their efforts on the description of particular social and political ills in society. The concern here was not with what could be done in terms of the organization of institutions or processes in order to prevent these ills from arising. Considering the recency of modern educational planning, it must

be stated that developments have been surprisingly rapid. Bacchus has noted that it was only with the realization

> . . . that man can manipulate the economic system to achieve certain economic goals which led -- though at a much later date -- to the following question which is now being asked in educational planning. "How can the educational system and the educational activities of a country be planned so that these would make a maximum contribution to the economic and social development of a country?" (Bacchus 1967: 222).

The application of Goodenough's model to the process of planning does not render planning a scientific discipline, nor does it answer the fundamental question posed by Bacchus. It does, however, avoid major pitfalls in planning social change and by so doing increases the likelihood that the goals of an educational plan will be realized. A recent planning document notes that:

> A strategy, no matter how well conceived, is of little value unless it can be implemented. The process of planning, therefore, must constantly take into account . . . available mechanisms for effective implementation (Education and World Affairs 1967: 15).

Our analysis and the record of a number of recent educational plans (see Jacobs, Weigand, and Macomber, 1963) indicate that participation in decision-making is seminal to effective implementation.

A first priority for educational planning, therefore, is to ensure that indigenous participation obtains in the planning process itself and in the decision-making apparatus set up as a result of planning.

Our second priority for educational planning (one which sounds rhetorical in its statement) is that a set of well defined priorities emerge from the process of planning. This statement is premised on the assumption that the resources of an underdeveloped area will not allow the short-term achievement of all goals that might be deemed desirable as a result of negotiation or planning. Because modern educational planning aims to bring about a

> . . . balanced development of the whole educational system . . . allowing for the economic and social factors operating in the country concerned (UNESCO 1962: 5),

the scope of any modern educational plan is necessarily broad and imposing. Given this scope, the temptation is to plan on the assumption

that all aspects of the educational system require "immediate attention and dramatic expansion" and to provide proposals which are in the words of one educational plan

> . . . massive, expensive, and unconventional. To accomplish all of them would undoubtedly be beyond . . . present resources . . . (Ashby et al. 1960: 3).

In their review of a number of recent educational plans, Jacobs, Weigand, and Macomber (1963) correctly note that such an approach fails to establish priorities, to work out feasible procedures and acceptable time phasing for implementation. Having located Micronesia in political, economic, and social terms, our second priority for educational planning is that priorities must emerge and must be related to the Micronesian situation and to alternatives open to Micronesians.

The approach taken by Harbison and Myers arrives at a number of specific recommendations for countries at given stages of development. In other words, their comparative study results in the establishment of priorities for the educational systems of countries at given developmental stages. As our analysis of the Micronesian economy suggested, however, economic priorities or educational priorities must be determined through consideration of the politico-economic constraints of the situation. As noted in a human resource development strategy in which Harbison and Myers took part,

> There are two major factors which constrain implementation of any strategy: (1) financial resources available for education and training, and (2) the quality of instruction (Education and World Affairs 1967: 14).

In dealing with the need to account for financial constraints, the same report continues:

> . . . this report examines in detail the financial constraints confronting the planner in attempts to implement a human resource strategy. These include the cost of various programs (and) the share of scarce financial resources available for such programs . . . (Education and World Affairs 1967: 14).

Realistic appraisals of financial constraints should form part of the communication and negotiation process of planning as derived from social change considerations. Because resources for education in a developing area are likely to provide rigorous constraints on educational investment, this approach will result in realistic priorities with high probability of implementation.

To the educational planner, the Micronesian case yields a number of implications beyond the general "participation" implication which was derived specifically from Goodenough's typology. In political terms, our analysis indicates that Micronesian participation must be sought not only in the planning of political growth and the formation of new political institutions, but that an explicit goal of educational planning must be the furnishing of a political elite for immediate leadership purposes. Moreover, from a decision-making viewpoint, education must quickly provide Micronesians with an awareness of political alternatives so that political choice becomes acceptable as a goal of trusteeship and realistic from the Micronesian perspective.

In referring to political leadership and political elites it is useful to think of politics as including not only government in the conventional sense but also decision-making in all spheres of public policy. Black (1966: 62) notes that:

> Political leadership must be thought of in terms not of the few leaders who make the headlines but of the thousands of individuals in every society who play a prominent role in political decisions.

The term "elite" is usually employed by anthropologists and political scientists in a rather specialized manner, referring to those persons or positions that command the greatest authority or respect in any group. For our purposes, "elite" is used in a fairly generalized way along the lines defined by Black. When this is related to planning, education is seen as providing for the emergence of a "societal elite" providing leadership and influencing decision making throughout the society. Our analysis specifies the emergence of such an elite as a priority in the modernization of Micronesia. Shils defines elite formation as a minimal requirement to a modern state:

> To be modern, a society requires at least a rational administration which extends its jurisdiction to the territorial boundaries of the state (Shils 1965: 495).

Another way of looking at the need for elite formation is provided by Galbraith who notes that for countries at a development level comparable to that in Micronesia, the failure of a competent elite to emerge results in disintegration, and

> It is not clear when (or even whether) the process of disintegration can be reversed by internal influences (Galbraith 1965: 25).

Our analysis has, therefore, stressed the importance of political leadership to the development of Micronesia; it has similarly stressed that one of the goals of educational planning is to attempt

to ensure that such leadership emerges. We have also derived from the short-run implication of a plebiscite the proposition that it is of immediate importance for education in Micronesia that measures be taken to provide for the dissemination of information regarding political alternatives available to the peoples of Micronesia. Educational planning for Micronesian political development should, therefore, be directed toward two political criteria:

1. the emergence of a modern Micronesian government which will operate an educational system, take responsibility for communication and transportation, seek to foster economic development and, in general, direct the institutions and structures of the society;

2. the provision of sufficient information to the Micronesian population as a whole to allow for a political decision which will affect the entire political future of the area.

CHAPTER VI

AN EDUCATION PLAN FOR MICRONESIA

Comprehensive Proposals

In April of 1967 the Trust Territory Government contracted with the Stanford Research Institute to assist in a master plan for educational development in Micronesia. The objectives of the proposed study were: (1) to develop a preliminary master plan for education in Micronesia; (2) to identify possible actions that might be taken immediately to enhance the educational program in Micronesia and to bring it into greater harmony with broader development objectives for Micronesia; and (3) to specify an approach for refining the preliminary master plan, including a definition of analytical studies beyond the limits of the initial study.

The defined objectives and scope of the study were similar to the notion of human resource development as outlined by Harbison and Myers. In this, the SRI report diverged markedly from the Nathan report in that the former assumed that all programs and any investment should first be considered in terms of capability for developing the human resources of Micronesia. Indicative of this assumption is a phrase which is used several times throughout the report: "Hire Micronesian, Train Micronesian."

Central to the methodology followed by the SRI team was the attempt to involve Micronesians in the planning process. Two conferences were held during the summer of 1967; both involved the participation of Micronesian leaders and educators. The first conference lasted for one week and attempted to identify key issues in planning education for Micronesia and to solicit Micronesian views on these. A second week-long conference was later held in which the SRI team submitted their preliminary findings and proposals. Negotiation as outlined by Goodenough took place and discussion occurred on the suitability, feasibility, and acceptability of these proposals. During the six-week interval separating the two conferences, members of the SRI team were dispersed to the various areas of Micronesia and spent approximately five weeks familiarizing themselves with local expectations, aspirations, and problems. Views were sought at the village level, from both American and Micronesian teachers, from the newly emerging Micronesian elite as well as from the traditional elite. Especially valuable to this approach was the experience of an anthropologist who was one member of the team, who had spent several years in Micronesia and who was fluent in two of the major languages of the territory. Following the second conference the team remained at the administrative center in order to carry out the following tasks:

1. Analysis of conference results
2. Collection of additional data from the Trust Territory Administration

3. Preparation of certain draft chapters of the final report
4. Briefings on the team's preliminary conclusions, given to members of the American administration of Micronesia
5. Briefing and discussions with members of the Congress of Micronesia, including a meeting with the Education Committee of the House and the Senate.

At each stage the team discovered that the Goodenough paradigm of wants and needs was applicable. In many instances American views of the wants and needs of Micronesians were in no way consistent with Micronesian views. Financial constraints on development and the necessity of establishing priorities were discussed. The report itself was the result of negotiation, of positing a number of alternatives by which certain wants might be obtained, discussing the implication of each alternative, and arriving at agreement on which alternative was maximally likely to succeed, or, to cast this in Goodenough's terms, arriving at an agreed-upon need. That this approach to planning met with the cooperation and approval of Micronesians is reflected to some extent in a resolution passed by the Congress of Micronesia which commended the SRI team on its approach and urged that copies of their final report be placed at the disposal of the Congress.

The approach to manpower planning formed one component of the SRI team's educational plan. As Coombs notes, however, there is a serious philosophical conflict between the new manpower interest in education and the traditional view of education's role in a free society:

> In the context of manpower shortage the educational system comes to be viewed as a "brainpower industry" whose social function is to develop human beings as instruments for building national economic strength. Under the traditional view of education it was taken for granted that education contributed only indirectly (and almost incidentally) to the economic and general welfare of the nation, but the overarching purpose of education in a free society was to enable individuals to realize their full human potentialities for their own sake (Bacchus 1967: 229).

The coupling of the manpower component with the negotiating approach suggested by Goodenough was an attempt on the part of the SRI team to reduce any potential conflict between these two approaches. The recommendations of the SRI team indicate that a broad human resource strategy resulted from their investigation -- a strategy which coupled manpower considerations with social and political considerations.

The major conclusions and recommendations of the SRI report are summarized as follows:

1. Human resource development should be elevated to the prime objective of the Trusteeship.

2. Even with the maximum feasible expansion of secondary and post-secondary educational opportunities for Micronesians, manpower shortages will occur in high- and middle-level occupations; this will be a limiting factor in the rate of economic development. Hence, out-of-school as well as in-school development opportunities deserve priority.

3. Manpower policies to ensure the employment and training of Micronesians in economic projects are to be encouraged. To assist in the creation and protection of such policies, a Manpower Board, broadly representative of all interests, is recommended. All economic development programs, the report recommends, should be considered against the criterion of Micronesian human resource development. Counterpart training programs are recommended for use wherever possible. If these recommendations are implemented, they will lead to the phased removal of non-Micronesian personnel which, it will be recalled, was urged by Harbison and Myers.

4. Planning for Micronesia's education is an ongoing process and as such, a structure is recommended to define and re-define the objectives of education and training in Micronesia. The report urges significant Micronesian participation in this structure and goes so far as to suggest that such participation might possibly come (in the early stages at least) from the education committees of the Congress of Micronesia.

5. The report notes that the present educational system in Micronesia requires expansion and improvement at <u>all</u> levels. However, secondary education needs to be given top priority at the present stage in Micronesia's development because of the immediate need for middle- and upper-level skills in economic, educational, and political development, plus the necessity to establish priorities with a view to maximizing financial resources available for education.

6. Coupled with 5, the report suggests that political and economic needs of Micronesians will best be met if the recommended concentration of educational resources is supplemented by a scholarship program which will afford ample opportunities for promising Micronesians to study at tertiary educational levels.

7. The report recommends that the Trust Territory administration establish a system of occupational education. On-the-job training programs were considered by the team. They are not, however, recommended for the present stage of Micronesian development since the training capacity of both the administration and the few private enterprises operating in Micronesia appears to be very low. One of the functions of the recommended educational planning structure would be to provide continual research into manpower needs and to see that occupational education programs were coordinated with these.

8. The report finds that the present system of teacher preparation in Micronesia involves the setting of American standards for teachers, and states that this standard is not appropriate to Micronesia, being much too costly in light of Micronesia's present level of development. Accordingly, the report recommends a more economical alternative. This plan involves phasing over a ten-year period and allows for: a) a gradual expansion of present facilities; b) the provision of Micronesian elementary school teachers to meet the projected needs of elementary schools by 1973; and c) the replacement of non-Micronesian teaching personnel at the elementary level by 1973. In the words of the report:

> The shift from U.S. contract teachers to Micronesian teachers is consistent with other recommendations in this report to shape education and training more appropriately to Micronesian needs (Platt and Sorensen, et al. 1967: 3).

9. Adult education facilities should be greatly expanded, utilizing all possible media. Special emphasis is placed on the functional value of adult education in the sphere of public information and in preparation for self-government.

10. The report urges that one criterion for judging employees of the Trust Territory government (non-Micronesians) should be the ability of these persons to train Micronesian counterparts.

11. Finally, the report states that Micronesians should be encouraged and afforded the opportunity to assume increasing responsibility for educational planning and policy making, as well as financial responsibility for the educational system.

The foregoing are only some of the major recommendations in the SRI report. It runs to over 200 pages and contains many others. What is important for our purposes is that the preceding summary demonstrates that the SRI team incorporated into its report many of the main implications we discovered in our analysis of Micronesia. In particular, the authors of the SRI report sought out and incorporated the views of Micronesians. Consistent with Goodenough's explication, considerable emphasis is placed on an increase in the number of Micronesians in the role of change agents. The recommendations for the creation of a Manpower Board and for a structure for future educational planning involve attempts to ensure that Micronesian wants and needs will be represented in major decision-making structures. Further, the SRI report emphasizes the expansion of second-level educational facilities, accompanied by a scholarship program to provide access to tertiary education; our analysis stressed that these would be the channels through which the new Micronesian elite is most likely to emerge. At all levels of formal education, the report attempts to relate projected manpower needs to educational output. Yet it also stresses the need for adult education because a) in traditional Micronesian society, manhood is not granted

to all males at age twenty-one, but is usually reserved for considerably older persons, and b) the approaching plebiscite will require that Micronesians at all age levels be aware of what political alternatives exist and of the probable consequences of any given political decision.

Despite the convergence of our analysis with the results of the SRI study, there are several distinctions and differences to be drawn. In the first instance, the SRI report assumes not only that Micronesia will move toward self-government (irrespective of what political alternatives are decided upon by plebiscite) but also that Micronesia's present geographical and political boundaries will remain intact. The political integration of Micronesia's presently disparate units may indeed be a desirable goal, as we have previously suggested, but the SRI report does not make clear what relationship education will have in building "one Micronesia". On the one hand, the report recommends the localization of elementary schools; on the other it suggests that there may be a danger in localized or district-based secondary schools:

> . . . while a high sense of local community identification with an elementary school is desirable, excessive identification could lead to provincialism and could be detrimental (Platt and Sorensen, et al. 1967: 87).

In considering the benefits of a degree-granting institution of higher education in Micronesia, the report states that such an institution

> . . . would be a unifying influence, providing its student body with pan-Micronesian experiences and attitudes (p. 133).

It appears that the SRI authors assumed that education would aid the process of political integration if secondary and post-secondary educational institutions could afford inter-ethnic contact and common experiences. No evidence is given in support of this assumption; indeed, it appears that evidence does not exist. The feasibility of the proposition that the present boundaries of Micronesia will remain intact remains to be determined. What is obvious is that the viability of the SRI recommendations would be considerably affected if the present territorial and political integrity of Micronesia were to be altered. Yet, in addition to not establishing a process whereby education would foster "one Micronesia" (or at least in failing to make clear such a relationship), the SRI report does not offer a contingent plan to cover the possible political separation of Micronesia.

In the absence of any clear present determination of the political goal, the SRI team accepted the axiom that its proposals for human resource development should not prejudice the attainment of possible political goals.

> We assume that during the Trusteeship, development efforts, including those in education and training, should keep open, as much as possible, the various options as to the type of political future Micronesians will choose when they exercise their right to self-determination. A criterion of validity for an educational proposal is thus its adaptability to any of the political options (Platt and Sorensen, et al. 1967: 8).

But the report goes on to state that regardless of the choice that the Micronesians may make,

> . . . in self-determination, we have assumed a continuation of some kind of U. S. involvement and financial support in Micronesia over the full planning horizon of our study (p. 9).

While this assumption can easily be defended given the reality of the existing and the probability of the projected financial dependence of Micronesia on the United States, the implications of increased financial dependence through the expansion of educational facilities does, de facto, impose a constraint upon the sorts of viable political alternatives available to Micronesia over the short run. In view of the possible political consequences of the methods employed by the SRI team to develop proposals for education, their application of the model does not satisfy the criterion. The implications of the proposed strategy for the feasibility of independence have not been spelled out, while alternative strategies appropriate to the several possible and different political goals were not developed. The report notes only that

> Time did not permit a systematic critique of proposals under each of these political conditions. Suffice it to state here . . . that we sought to keep options open (p. 8).

The prospect of an educational system in Micronesia expanded over the next several years by means of the steady input of U. S. dollars, and with the United States assuming the burden of recurrent educational expenditures over the foreseeable future, is one which appears to effectively preclude the alternative of independence.

In the context of the uncertainty of Micronesia's future and the relationship of different options to different patterns of human resource development, the responsibility of planners is to provide information on which policy decisions can be based rather than a single strategy which is related to different options in different degrees. This responsibility is increased by Micronesians' lack of appreciation of the relationships between education and the several development alternatives before them. The wants and needs of Micronesians as to the

political future cannot be divorced from their aspirations toward the alternative prospects for education which are posed by the political options. Though the SRI report accepted that the participation of Micronesians in decision-making is an axiom of the Trusteeship agreement, it did not inform Micronesians of the alternatives which would flow from the options of either a rapid movement to independence on the one hand, or absorption into part of existing U. S. territories on the other, though the independence goal is a possibility inherent in the trusteeship and a goal of absorption is held by existing political parties. Here the SRI team adopted the most likely short-term political goal and avoided the task of explicating the alternative, long-term goals, as a basis for educational strategy.

Our propositions for political and social development converge on the priority to equip a Micronesian leadership capable of decision-making at all levels, including the formulation of long-term political and economic strategies through programs of higher education. The SRI plan incorporates proposals to mitigate the present and anticipated shortfall of college graduates through improvement in the quality and quantity of secondary education for all Micronesians, the provision of a college preparatory program to increase the proportion of successful college students, and by improved counseling services. Each of these approaches, while no doubt directed toward the long-term strengthening of the formal education system will do little to accelerate the flow of college graduates in the short term. While these proposals form an adequate expression of the need to strengthen the educational structure and to utilize education as a tool for economic growth, they do not recognize the present political imperatives or the emphasis we would place on the decision-making role of Micronesians.

The absolute priority for leadership development which we derive through the perspectives of comparative models requires the education planner to identify those points both within and without the formal education system at which the short-term development of leadership can be accelerated, simultaneously with the more gradual increase in the stream of young graduates. While these potential points are not easy to locate, and the selection of those to be provided with programs and the design of programs may involve both innovation and the possibility of occasional failure, a high priority for leadership development requires the use of less gradualist approaches. Seminars, workshops, and longer programs of formal education designed for the specific needs of those Micronesians in emergent leadership roles, and the selection and enriched education of outstanding school students provide means for potential acceleration to which the SRI plan gives little attention.

It will be recalled that we discussed the necessity of establishing priorities and of considering financial constraints in the planning of education. In general, the SRI report does attempt to establish priorities even though it makes recommendations for the entire

educational system. What it fails entirely to do, however, is to provide cost studies or to discuss the financial constraints which led to its priorities. Given the assumption of continued U. S. involvement in Micronesia, the authors of the report are no doubt correct in assuming that the resources of the U. S. are more than sufficient to see to the expansion of Micronesia's educational system. The question which must be asked, however, is whether even a much-expanded Micronesian economy will be able to support the educational industry which the SRI report plans for Micronesia. No attempt is made in the report to analyze the cost of educational expansion in terms of these constraints or, for that matter, in terms of any other constraints.

It is, of course, possible that Micronesians might still choose independence in 1972 and then use their strategic location to extract financial supports from other countries. The political possibility and the economic value of this is, however, undetermined; such an assumption is, therefore, unmanageable in terms of planning.

A further planning weakness derives from both the structure of the SRI planning effort and the recommendations of the plan itself. Although Micronesian participation was an axiom accepted by the SRI planners, this participation was quite circumspect in that no Micronesian personnel were involved to the degree of active participation on the team. To act in an advisory or consultative role is qualitatively different from involvement with the team writing the report. The argument may, of course, be proffered that planning expertise is a necessary precondition to team membership, but this is inconsistent with the fundamental propositions which we have derived from our social change analysis. Moreover, other educational planning efforts which followed essentially the same procedure as SRI have been found deficient in the marginal participation of those for whom the plan is being made (see Jacobs, Weigand, and Macomber on the Ashby Report; see also Bezanson on the same report).

It follows from this that questions should be raised as to the efficacy of the entire process by which the plan was constructed. This process may rightly be viewed as follows: a) short-term involvement; b) intensive but limited fieldwork operations; c) negligible follow-up by the team itself. The approach, in other words, is that of a task force. In his foreword to a similar report on Nigeria, Harbison cryptically notes the need for the ongoing involvement and follow-up by the task force approach:

> Although this document is entitled a final report, it is hoped that it will provide a basis for further, more intensive discussions. . . there is need to discuss fully with officials the observations and recommendations set forth in this report, and to try to build a consensus among interested parties . . . The . . . Task Force expects to participate in this important consensus-building exercise (Education and World Affairs, Dec. 1967: 9). (Underscoring ours.)

If the task force approach is to continue as a standardized approach to educational planning, two propositions follow: 1) participation of those for whom the plan is being made should be to the extent of involvement on the task force, not merely as members in advisory roles, and 2) because of the short-term involvement of the task force approach in advance of the tabling of a report, follow-up through discussions at all levels with the purpose of attempting to build a consensus appears to be a necessary part of the planning approach. Both propositions find ample support through analysis; both point to weaknesses in the SRI effort.

If we refer back to our analysis of identity and identity change, the most fundamental proposition which we derived was that immutable notions of Micronesian identity must be recognized and preserved. In this connection, the SRI report urges from a practical viewpoint that Micronesians be involved in and placed in decision-making roles. The report, however, places its greatest emphasis on Micronesian decision-making as this would relate directly to education and to educational developments. The more immediate changes in Micronesian identity will arise from decisions taken in the political and administrative spheres of the territory. Here it must be noted that the report places little emphasis on recruiting Micronesians into these pervasive decision-making areas over the short term. There are statements in the report which suggest that non-indigenous personnel should be judged in part by their ability to train and shift responsibility to Micronesian counterparts. Attention, however, is not drawn to the revolutionary changes which confront Micronesians or to the deleterious results which might follow should these constitute a direct challenge to aspects of identity which Micronesians perceive as immutable. Such changes over the short term are likely to have relatively permanent effects. Changes instituted by Micronesians, on the other hand, are less likely to challenge immutable aspects of identity. It seems, therefore, that the SRI report does not give justifiable emphasis to the need to recruit Micronesians into the most influential decision-making roles over the short term.

Educational planning is an activity of quite recent origin. The UNESCO document, Elements in Educational Planning, mentions three specific stages in the development of modern educational planning. In both of the first two stages education was regarded as a social service which a poor country could scarce afford to provide. The third stage involves that of overall educational planning aimed at bringing about a balanced development of the whole educational system. At this third stage, education takes account of social and economic factors in order to "fit into" a general development plan.

Beyond these three stages of educational planning, however, lies a fourth stage -- one which is not mentioned in the UNESCO document. This stage can be described as the stage at which educational planning attempts to make a more direct contribution to the attainment

of social and political goals, and to the implementation of development plans by attempting to ensure that the educational institutions are providing the manpower needs of the developing economy. Bacchus (1967: 225) describes this fourth stage of planning as follows:

> . . . educational planning is no longer aimed simply at getting education to fit into the development plan. Instead, educational planners are beginning to examine how the educational system of a country can be planned so as to contribute most effectively toward the attainment of . . . social and economic goals . . . In fact, this extension of the scope of educational planning is aimed at giving education a more positive role to play in the country's economic and social development.

We conclude that the SRI report involved an educational planning effort at the fourth stage of educational planning as outlined by Bacchus. While efforts were made to fit education into the economic development plan for Micronesia, the process of planning itself and the structure for further planning of Micronesian education places education in a most instrumental role in the social, political, and economic developments of the area. Planning was viewed by the SRI team as a continuous process which would conceivably lead to restatements of goals and reassessments of priorities. Despite some obvious weaknesses in the SRI report, the planning effort affords, indeed encourages, the ongoing assessment and reassessment of plans, priorities, and alternatives. Micronesian participation in this ongoing planning is strongly endorsed by the report. Thus, if the SRI report has overlooked alternatives as we have suggested, it also attempts to place Micronesians in a position where they may deal with what has been neglected in Micronesia's present plan for educational development.

Manpower Estimation

Up to this point the desirable characteristics of the education system have been derived explicitly from the analysis of other systems as a series of dependent variables. Implicit in this analysis, however, is the view that education is a powerful independent variable for these development processes through its role as a generator of the human capacities vital to the shaping of these processes. We need to consider also that access to education is an aspiration of the population and forms an important goal for the political system and the society in its own right. Micronesians across the islands at all levels of occupations express this desire for more schooling for children and more adult education.

It follows from these perspectives that the quantitative and qualitative parameters of an education system cannot be derived

exclusively from a consideration of the need for economic growth. This would not only represent a partial consideration of the demands upon education, but would also neglect the dependence of economic growth policies upon the growth strategies developed by the political leadership and acceptable to the constituencies, and the aspirations of the people for social development.

One approach to the problem posed by the need to consider the enrollment and structure of the education system as dependent upon a number of these variables has been to place the responsibility for manpower projections with economists who use specific and narrow economic growth targets or projections as their exclusive criteria, and for education and other policy planners to use these "economic" estimates as guides in the formulation of education plans.

The difficulties in reconciling economic and other criteria when these are used independently to define needs for education have been stated by Parnes (1962: 23):

> If one begins with the "manpower approach", the required enrolment ratios that this yields can be compared with those established by the "cultural approach". Increases in planned enrolments over and above those indicated by manpower considerations can simply be "added in" . . . Actually, if alternative targets have been established in the cultural approach, as has been suggested, there will be several sets of data, the cost implications of which may then be explored.

In Micronesia economic criteria alone are the basis for the projections of manpower needs made in the report of the Nathan Associates. The exclusively economic goal of this report was to attain a maximum rate of increase in the gross national product by increasing the flow of private investment from external and internal sources and underpinning this flow with governmental expenditure on supporting infrastructures.

The central weakness in this approach is not that the economic targets are unrealistic on economic criteria or that the baseline data or methodologies are inadequate -- although both these factors are extremely difficult of solution in a country in the early stages of development -- but that the economic targets may be unrealistic when related to the political and social realities of the country as well as being only one of several demands upon the education system. We have already advanced the criticism that the Nathan recommendations for economic growth are unrealistic and probably undesirable in relation to the social realities of Micronesia. Because the alienation of land, and the importation of foreign labor in large quantities as recommended in the economic plan are unacceptable to the political elite which must

have the support of Micronesians, these economic criteria not only neglect, but actually contradict the goals of the political system. Were the Nathan plans not merely economic, but part of an overall development strategy, this criticism would not be pertinent, but it would still be true that the need for manpower for economic growth could be only part of the total need.

Harbison and Myers have proposed that a "strategy of human resource development" should replace estimations and projections of the manpower needed for economic growth. Such a strategy would consider economic data as one input, but also consider as inputs the goals for the society held by the elites, and the pressures inherent in the political and social systems in the country. All these factors should determine a strategy which recognizes the dynamic interrelations between them, and gives a balanced weighting to each. The strategy would not comprise a "forecast", but define a series of "goals" which could guide a "balanced" development of human resources in the sense that it responds to a number of goals.

> The essence of a strategy of human resource development is the achievement of an effective balance in choices between policy alternatives. The nature of this balance depends upon the goals of a society, its level of development, and its leadership. A country which fails to achieve a proper balance will produce the wrong kind of high-level manpower . . ., invest in the wrong kind of education (Harbison and Myers 1964: 175-176).

The importance which this model gives to the interrelationships between different aspects of development recognizes the most salient characteristic of current development programs within Micronesia. Its emphasis upon the use of the goals of the leadership group(s) in a country as a real factor accords with the proposal we have made for the consideration of the wants of the society as both a real and an ideal factor in social change. The use of these goals as criteria for a suitable strategy also avoids the ethnocentrism inherent in the alternative of imposing the planners' goals and views of an appropriate strategy upon the country.

While these characteristics of the model suggest its suitability for the Micronesian case, they also pose considerable analytic problems in application. For it demands the identification of the real factors in development and, particularly, the interrelationships between them and the implications of these interrelationships for human resource development; and it calls for a careful judgment as to the operative goals in a country which has an expatriate executive but no unified leadership and few articulate leaders among its own nationals.

Harbison and Myers' insight into the real pressures which a strategy of human resource development must satisfy is provided by the

comparative analysis of countries at different levels of human resource development. The typical pressures which they identify for Level I countries are recognizable as pressures in Micronesia. It needs to be asked, further, whether they have a typical weight in the Micronesian case, whether they are related in the typical way, and whether there are not other factors which have equal or greater significance.

In their view, the most important short-term need in Level I countries is the attainment of political sovereignty since this is a goal in political development, and a precondition for the formulation of stable long-term programs for economic growth. The corollary to this pressure for human resource development is a plan for rapid replacement of expatriates, the development of high-level manpower through a crash program of secondary education, maximum increases in tertiary education and executive training, and, where the resources are limited, a qualitative rather than quantitative improvement in elementary education. Our analysis of political development in Micronesia has led us to interpret the short-term political goal as preparation for self-determination and a substantially higher participation in self-government, while the long-term goal may involve a voluntarily restricted sovereignty, or full sovereignty.

The short-term strategies for economic growth will be formulated by the expatriate executive which controls the major inputs into the economy, but formulated in response to the emerging Micronesian leadership, the restraints of public opinion, and policies sanctioned by the United Nations. Stable, long-term policies must await the future political decisions as to the unity or separation of Micronesian regions, and these decisions in turn depend upon the emergence of an articulate, responsive, and authoritative leadership. To conclude, therefore, that the urgency of the development of an indigenous leadership in Micronesia is less than for the typical Level I country would overlook two significant problems. One is the neglect of leadership development in the past, which is thrown into sharp relief by the sudden revolutionary changes in political and economic policies which an indigenous leadership must confront. The other is the significance of the educated to formulate and give direction to Micronesian political and economic aspirations given that these will be quickened by the massive recent inputs of finance and manpower by the administering authority. The marked discontinuity of change in Micronesia and the range and complexity of urgent choices demand that leadership development be given an urgent priority in the short term.

The implications for human resource development which flow from this conclusion are closely similar to those which follow from the "typical" country's task of political sovereignty. Plans for the replacement of expatriates, however, would need to wait upon increased output from the education system since there is no reservoir of trained Micronesians. Because the level of resources available to Micronesia is fixed by the American government, the quantitative expansion of elementary education through capital expenditure need not be limited by

physical resources, though the level of the recurrent expenditure which may need to come from Micronesian sources in the future has to be considered against the capacity of a future internal economy. This model emphasizes the importance of the long-term strategies of the political and economic elites as the most significant factor in economic growth. In Micronesia long-term strategies have not been adopted by the administration, and the proposals of the Nathan Associates which assume a long-term future based on imported foreign capital have been found to be unacceptable in part by an administration which is concerned with their political consequences in the short term. The short-term strategy which is clearly defined by the administration is for a vastly increased expenditure in a transportation and communication infrastructure, encouragement to a tourist industry and an increase in indigenous cash cropping.

The Micronesian political leadership groups have not articulated policies for economic growth and are not equipped to do so by present training nor encouraged to do so by a system of investment which confines Micronesian responsibility to the distribution of internally raised revenue. The first major implication of this model for human resource development is the need to promote those Micronesians who will begin to formulate the economic policies which will satisfy their social and political aspirations. The capacities associated with this task are to be found in the high-level manpower promoted by tertiary education and executive, managerial and administrative experience. The implication, therefore, accords first priority to the higher levels of formal schooling and commercial and administrative training.

Presently held goals of Micronesians relevant to the economic strategies which may emerge are as diverse as the impulse of the Saipanese for incorporation into Guam -- the concern for jobs of the people in the many small settlements which constitute the many islands' towns and the concern of many groups to retain their land for cash and subsistence crops.

There are, however, some commonly held aspirations of Micronesians which can be expected to exert pressure on the strategies which will later emerge. Many Micronesians have been associated first with Japanese and then with American economic enterprise and support, and at present receive incomes in excess of those to be found in other Level I countries. There is a strong impulse toward employment in the wage economy and there has been a substantial migration from many small islands to centers of employment in the districts. The level of wants of the Micronesian people can be satisfied only if the skills and organizing capacities of Micronesians are advanced rapidly, because the geographical dispersion and lack of physical resources of the islands severely limit economic growth which depends upon natural resources.

These economic aspirations of the Micronesian people, together with their relatively high level of income in relation to productivity demand a human resource development strategy which will increase the

effectiveness of those who are already employed, particularly in technical, commercial, and managerial skills. Such a strategy will also create incentives for the employment and training of Micronesians to promote levels of productivity which will support incomes greater than those in surrounding Asian labor markets.

The model's process of translating pressures and goals for political and social change and demands for economic growth into quantitative and qualitative needs for manpower involves the following judgments (Harbison and Myers 1964: 202-208):

1. The planner must select those goals for the country which are most important and generally accepted.
2. Major reliance should be placed on reasonable comparisons both within the economy and with other countries, since nations tend to formulate their policies by comparing themselves to other countries.
3. The estimates of manpower requirements should be considered as targets which will influence the direction of growth rather than precise goals to be reached in a given time.
4. The estimates should provide a comprehensive and balanced set of targets, integrated with general development policies.
5. Since comparisons yield only approximations to appropriate targets, the targets should be arrived at by a number of methods.

Because there are no comprehensive proposals for economic growth in Micronesia which have the status of plans, and the proposals which do exist represent a radical departure from the stagnant economy of the last several years, Harbison and Myers' argument for the rejection of forecasting approaches are highly pertinent to the Micronesian case. Again, however, there are serious conceptual problems in the application of this target-setting approach in addition to the central problem of establishing goals.

Countries with political and economic circumstances which are analogous to those of Micronesia are difficult to locate. Those countries which are also within the sphere of influence of the United States are not trusteeships, and the patterns of development in the Virgin Islands, Hawaii, Guam, and to a lesser extent American Samoa, are not consonant with trusteeship objectives. The United States, which has been used by the administration as a norm to set standards for education, does not provide a comparable economy for this model. Comparisons with a number of countries at Level II on the Harbison and Myers

index is possible, however, from comparative data on occupational structures recently published.[1,2] The per capita productivity of workers in these economies, from $570 to $740, is comparable with that in Micronesia of $850, a figure which reflects the U. S. influence rather than the influence of market factors on Micronesian wage rates. Data from the same source are available for the levels of education which are associated with the structure and productivity of manpower. The limitations upon these comparisons are, however, serious. The use of Level II countries to set targets is not part of the framework of comparisons used by Micronesians or the U. S. administration, and the structure of industry in these countries would need to be compared more closely with the structure in Micronesia before comparison could be considered valid.

Human resource development was accepted by the Stanford Research Institute as a goal derived directly from the purposes of the Trusteeship.

> We assume that self-government is to be exercised by the Micronesian prople themselves and that it is to their political, economic, and social development that all development effort should be directed. Therefore the overriding meaning of the Trusteeship agreement is that the development of human resources should be the major focus of effort (Platt and Sorensen, et al. 1967: 7).

Further, this objective was given paramount importance when integrated with other development goals.

> This criterion of development thus transcends other development objectives. Such sub-objectives as rapid land improvement, expansion of tourism, and improvement of transportation facilities are thus judged not only in their own right, but also against the conclusion of their contribution to the transcending objective of human resource development (Platt and Sorensen, et al. 1967: 7).

The overall approach to the definition of volume in human resource development was to use manpower or economic criteria to set the targets. The Nathan Associates' targets, based on the overall goal of promoting maximum private investment, were used as one set of approximations. An establishment survey of administration departments which

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[1]See P.R.G. Layard and J. C. Saigal, "Educational and Occupational Characteristics of Manpower: An International Comparison", British Journal of Industrial Relations, Vol. IV, July, 1966. Data are published for Level II countries of Peru and Ecuador.

[2]Structure here is the proportion of the work force in the various occupational categories.

employ approximately 80% of the current work force yielded a projection which was used as a second approximation. Both approximations diverge from the model in that they are limited to economic criteria, and the Nathan projections with respect, also, to their status as economic policy. Both approximations are limited to the very short term -- a period of five years -- and the Stanford Research Institute felt the necessity to extrapolate for a further five years.

The structure of this manpower, with respect to the proportions of professional and technical, administrative, clerical, skilled, and semi-skilled workers was derived by a series of comparisons with the existing proportions in Micronesia and comparison with the proportions in the U. S. work force of 1960. At this point the procedure used diverges from the proposal in the model to use comparison with other countries at a similar level of development. The procedure, therefore, may well overestimate the proportion in the higher levels of skill. This is illustrated by comparison of the structure proposed by the SRI team with those for Peru and Ecuador (Level II countries) in Table 3 (page 76). Yet it is apparent that the proportions of the 1967 Micronesian work force in these occupations were as high as those to be found in Level III, semi-advanced, countries. (See Table 4, page 76.)

The result of the SRI procedures, then, has been to propose targets for Micronesia which the model would support as appropriate for the semi-advanced countries.

The educational attainment targets for these estimates were obtained in a similar manner. The proportions at different levels in the Micronesian work force were upgraded by reference to the proportions to be found in those countries intermediate between Micronesia in 1967 and the United States in 1960, countries in which the productivity per worker was similarly intermediate between that of Micronesia and the United States. Judgment of the relevance of these comparisons was made on an ad hoc basis, though the basic comparative data are empirical (Platt 1966: 101). (See Table 5, page 77.)

These demands were accepted as targets for the education system in the sense of targets in the Harbison and Myers model -- they were used to establish the direction in which the education priorities should be set in order to satisfy these economic criteria. This is to give priority to output at the secondary, vocational, and post-secondary levels of education. This priority was related to the structure and volume of the education system by an analysis of the current intake (95% of the 7-to-14 age group and 68% of the 15-to-19 age group) and of bottlenecks in the flow of students through the system, chief of which were the retardation of students at all levels and the inadequate supply of secondary school places and tertiary scholarships. Translated into the educational system, these demands became the education target of expanding secondary, occupational, and tertiary education as

Table 3

SRI Estimates of Proportions Compared With Level II Countries

	Prof & Tech %	Admin %	Clerical %	Skilled %	Semi-skilled %	Sales %	Other %	Total
Micronesia[1]	12.1	13.2	13.0	16.5	19.2	-	26.0	100
Peru[2]	3.7	1.3	3.3	-	-	7.7	84.0	100
Ecuador[2]	3.3	.3	3.3	-	-	6.1	87.0	100

Table 4

Micronesian (1967 actual) Proportions Compared with Proportions in Uruguay (1960) and Panama (1963)

	Prof & Tech %	Admin %	Clerical %	Skilled %	Semi-skilled %	Sales %	Other %	Total %
Micronesia[1]	8.7	3.0	3.9	11.5	11.8	-	61.1	100
Uruguay[2]	6.1	1.5	12.5	-	-	10.6	69.4	100
Panama[2]	5.1	2.4	6.1	-	-	5.6	80.9	100

[1]Adapted from the SRI report, Table 5, pp. 27-8 and Table 3, p. 24.

[2]Adapted from Layard and Saigal, Table 5, p. 264. Because of rounding the totals of the columns may not add exactly to 100.0.

Table 5

Comparison of Demand Estimates 1968-1972[1]

Level of Education Completed	Estimate from Economic Targets	Estimate from Establishment Survey*
College	1,370	792
Junior College	67	871
Vocational and Secondary	1,729	2,407
Eighth Grade	5,178	2,045

*Based on those establishments which employed 80% of the 1967 work force, hence an underestimate of total demand.

[1]Adapted from the SRI report, Table 19, p. 49.

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rapidly as the quality and quantity of students would permit, given serious attempts to eliminate the bottlenecks.

A comparison of the feasible supply of manpower from the education system with these targets indicated a considerable shortfall at the college level and an approximate correspondence at the vocational and secondary levels.

Table 6

Comparison of Demand and Supply Estimates 1968-72[1]

Level	Demand		Supply
	Comprehensive Approach	5 Trust Territory Depts + Private Education	
College	1,370	792	108
Junior College	67	871	211
Vocational and Secondary	1,729	2,407	2,767
Eighth Grade	5,178	2,045	7,369

[1]Adapted from the SRI report, Table 19, p. 49.

This gap, or shortfall, between the formal education system and economic targets was interpreted to hold implications for the pace of economic growth and for the system of generating manpower within the economy via certain perspectives or social and political development goals. The Nathan report proposal to meet shortfalls by the importation of foreign labor and by pressure to increase Micronesian migration would satisfy this shortfall in strictly economic terms. Yet this solution would not satisfy the social development criterion of maximizing Micronesian participation in employment and decision making, or the political goal of restraining foreign immigration which is accepted by the administration and Micronesian leaders, albeit for rather different reasons.

The SRI report proposed that economic growth goals should be integrated to a greater degree with these sociopolitical considerations by means of appropriate manpower development policies, and, if it should be necessary in addition, by a less than maximum rate of expansion in the capital construction programs. The chief means of integration proposed was the development of a manpower development policy for government and private enterprise which would establish a high priority for employment and on-the-job training of Micronesians. Structurally, the policy was to be implemented by a manpower board made up of representatives of the administration and of Micronesians in government and private enterprise.

Conceptual and structural links between human resource development perspective, overall planning, and the education system were recommended through a radical change of design for the administration of formal and post-employment education. This design called for the creation of a Human Resource Development division of the administration, with its executive head an Assistant Commissioner at cabinet level of overall development planning. Within the division, the heads of the sections concerned with formal schooling and with occupational and community education were accorded equal status in an attempt to promote a balanced allocation of resources to each type of program. Manpower needs, education planning, and occupational placement were linked through the proposal to set up a research and evaluation function which included planning for education and manpower relationships, as well as guidance functions to relate education more closely to occupational characteristics.

Micronesians were to be associated with this structure through a committee of Micronesians drawn from the Congress. The committee would recommend on the functions and structures of advisory boards for education at the central, district, and local levels.

By considering the task of human resource development to be defined by political, social, and economic criteria, the SRI aims were in accord with the view of human resource development proposed by the Harbison and Myers model. The methods followed to set targets and define needs did, however, make use of essentially economic criteria with respect to the structure of the work force in "comparable" countries and the attainment levels in education which, in other countries, are associated with similar levels of productivity. In practice the

comparisons which were used as the basis for targets have established targets which are beyond the level of the Micronesian economy to sustain unless that economy is subsidized very substantially by foreign investment, which certainly means United States investment, for a long period.

The same method of analysis, though based on economic criteria, led to a target for the most rapid feasible expansion of secondary and tertiary education. This target is consistent with the implications for education which we have derived independently from analysis of the demands of political and social development.

Should economic and political dependency be related, the method of analysis adopted by the SRI team would ensure a strong dependency on the United States at the time of the plebiscite in 1972. It also assumes an economic situation which will restrict the political options available to Micronesia beyond this decision point.

The following is an alternative application of the model if a goal of political independence based on substantial economic independence is accorded a higher priority. Economic independence would imply a reduced input from foreign investment, reduced quantitative and qualitative requirements for manpower, and, consequently, less ambitious targets for the education system. The comparable countries to be used as the basis on which to set targets would be those with a manpower structure similar to Micronesia but capable of sustaining political sovereignty.

The possibility that this goal may become paramount in Micronesia is recognized at least in the explicit policies of the United Nations and of the U. S. government. The program of the U. S. government includes plans to establish a Commission

> to promote the development of the inhabitants of the Trust Territory toward self-government or independence as may be appropriate (Joint Resolution of the U.S. Congress Regarding the Status of the Trust Territory of the Pacific Islands).

Clearly, the relationship which will exist between economic and political independence in the newly developing countries is not part of a human resource development model. Rather it is a problematic issue for which evidence must be sought by the comparative analysis of data from countries which are at a similar stage of development to Micronesia. Just as clearly, for the task of planning a human resource strategy, Micronesia needs to be informed by this type of analysis, or, if the analysis is unavailable, the human resource planners need to be informed by experienced students of this particular issue in political growth.

In the Micronesian case, the general strategy of the Harbison and Myers model has provided a fruitful heuristic framework in which to identify the factors in the political, economic, and social systems which are related to human resource planning, and to suggest the structures which will incorporate human resource development perspectives in the centers of decision making. The strategy of target setting, rather than of forecasting requirements, provides an approach which is apposite for the present amorphous stage of economic growth. The model's emphasis upon the development of a Micronesian leadership able to articulate their own goals and strategies accords with the needs in political and social as well as economic aspects of growth in Micronesia.

The chief difficulty of this model is in the latitude provided for judgments as to appropriate comparative data, and in the challenge this poses for planners to consider the implications of particular comparisons for the social and political systems. These judgments can be strengthened only by research to enrich the comparative economic data, and by further analysis of the implications for changes in the political system which flow from the use of these data.

CHAPTER VII

THE VALUE OF COMPARATIVE MODELS

Throughout this monograph we have viewed the problems of education through the perspective of the needs for development in interdependent political and economic systems and for social and cultural change. The social domain has not been conceptualized as a system, but rather as a set of relationships between the peoples of Micronesia, and in particular as the relationship of Micronesians to the points of decision making which affect the direction of change, points at which the expatriate administration has, for the most part, wielded executive power.

Each of these aspects of development has been considered from two points of view, one concerned with the definition of goals for the system, the other with those relationships within and between the systems which we have considered to be necessary conditions for the attainment of goals. Thus we have assumed that education is a necessary condition for the emergence of the leadership which is required to establish political and economic strategies; it is a necessary condition for the development of the skills and mobility required for economic growth; and it is necessary for the effective participation of Micronesians in decision making processes.

The reason for the consideration of both these aspects lies in the assumption that it is possible to establish predictive relationships between the education process and these goals and system requirements in general, and for the particular country under consideration. We have attempted to explicate the relationships by using a number of models of development processes and by attempting a logical analysis of their applications to the conditions of Micronesia. The explication of relationships will have been biased toward the relationships which are salient in these models, and will have been realistic and comprehensive only insofar as the models are applicable to countries in similar stages of growth (thought of as Level I in manpower terms, or as colonial with weak indigenous structures in political terms) and to a case with the unique geographical situation and contact history of Micronesia.

The questions which the Micronesian case pose for the validity and utility of these models can now be raised, together with the question of whether these models have been wisely applied.

It is clear that the models have different characteristics as conceptualizations of development processes and problems. Almond and Powell's functional propositions which relate aspects of the political system to its effectiveness are highly abstract and of such generality that they are offered as a framework for the analysis of any

political system at any time. C. E. Black's criticism that their constructs are so vague that they may be interpreted differently by different students indicates the judgmental nature of any attempt to use them in the analysis of a particular case. Their own elucidation of the constructs in particular times and places does not provide an illustration of the pertinence of the constructs to small-scale colonial societies. On a number of issues pertinent to the Micronesian case the model offers little guidance. Almond and Powell have little to say as to the key factors in the political system which are causes or consequences of strong sentiments of separatism in the society. While they suggest that national sentiments are the key to political integration, they do not isolate the functions of the political system which are necessary to promote these sentiments. In a situation where the local elite is small, relatively untrained in executive functions and itself far from unified, the model does not suggest which functions in the political system may be taken over by a local elite with most effect on the system as a whole.

The model lacks specificity, then, with respect to three characteristics required by education planners. Its basic constructs are vague and difficult to identify in the non-western societies at a stage of transition toward greater indigenous participation in the political system. In addition, the generality of the model provides only tenuous links between the political system and education. At least so far as we have used them, their propositions have yielded very general priorities as to the importance of the kind of education which will promote an effective leadership -- one which may have the capability of developing strategies for change, promoting ideals of national integration, and, by virtue of Micronesian identity, enable the political system to gain in popular support, thereby accruing greater power to influence change. These are important general perspectives for the education system, but they do not advance beyond the insight into the role of leadership in developing countries provided by the comparative analysis of E. A. Shils (1959-60), nor take us far beyond the resolutions on the importance of leadership development offered by the trusteeship council of the United Nations.

C. E. Black's approach to the formulation of factors significant for political growth is guided less by the aim of developing a general system model and more by a concern to identify the modal issues and problems which confront systems under different historical and current external and internal constraints. The common problems he identifies are inferred from the analysis of societies which are broadly similar with respect to these conditions. Thus, Micronesia is identified with those colonial and ex-colonial countries of small scale in which the external pressures bring about a rapid change in traditional institutions. Micronesia, together with upward of forty countries, seems to be cast in this type of drama. This greater specificity of environmental constraints and of material from which to make comparative influences, however, is not matched by precision in the analytic categories

which define the modal problems. Consequently, these categories offer only the broadest framework in which the problems specific to Micronesia can be sought. His assertion that political integration is a major problem in societies of this type and his concept of the significance of a modern leadership for development are confirmed by our analysis of Micronesian conditions.

Neither of these models, then, provides more than a broad analytic framework, together with a number of highly abstract constructs for the analysis of political problems and the prospects for political growth in countries which, by virtue of historical experience, social structure and composition, and geographical location, might be classified with Micronesia. They are most useful in directing analysis to the necessary conditions and the typical problems associated with political change but relatively weak in the provision of models based on the key issues which the general models raise. Given that the development of leadership is a necessary condition to strengthen vital aspects of the political system, the question is one of defining the necessary characteristics of an effective leadership. Given that integration is a key problem, a model of the conditions necessary to promote integration is required.

Some partial insights into these problems have been afforded by scholars who have utilized comparative analysis. E. A. Shils' study (1959-60) of the role of new elites (chiefly in Africa) provides evidence of their functions in different political contexts. Clifford Geertz (1963) has identified some major factors for the development of higher degrees of national integration, chiefly for Asian examples. The lack of detailed comparative analysis of these problems for the smaller countries recently emerged or still under the control or influence of a powerful, highly developed country is at present a serious deficiency for education planners. The countries of the South Pacific and many of those in the Caribbean provide examples of this type.

Ward H. Goodenough's examination of the relationship between change agents and their clients has been used to provide insights into the processes and problems involved in social change. His analysis provides two paradigms for this process. One is a conceptual framework which facilitates the examination of change processes through a type of input-output analysis. It is suitable for use by the planner who is concerned with the consequences of his educational proposals, and it is value free. The other, and the paradigm we have used here, is the most explicitly normative framework of the several we have used and is derived from less comprehensive comparative material.

Goodenough's central postulate is that the goal for community change is to establish a process based on the free participation of the peoples in the community at the level of goal setting and the level of developing action plans. For this process, he has established those principles, supported by case studies, which are most likely to bring about relatively harmonious and effective changes. Given this value

position, his principles can be cast into a series of if-then propositions which we have utilized in our analysis. The major proposition is that if the Micronesian people are able to participate in decision making at all levels of the political and economic systems and in the education programs, social change will be both desirable and more effective. Most directly this position contradicts the view that an increased productivity based on external capital is the major goal for Micronesia, a goal which, through setting up economic and social pressures which include the migration of Micronesians and the addition of permanent migrants from abroad to the society, will bring about rapid social changes and long-term political ties between Micronesia and the United States. It contradicts the view also that the most effective way to mobilize development is through the direction of change programs by a specialized elite, military dictatorship, or doctrinaire social reformers. Each of these alternatives has been adopted as intellectually desirable or as practical necessities in response to the pressures for development in many countries.

Three reasons can be advanced for the pertinence of Goodenough's proposals for the Micronesian case. The pre-eminence of Micronesian goals is consistent with the explicit goals of the Trusteeship, the administering power, and the Micronesian people; and although the administration has the effective power to induce social change by methods appropriate to these other alternatives, its goals preclude it from doing so. Within the emergent Micronesian political and economic system authority is recently and only weakly centralized, and as yet without either the strategy or power which would permit the exercise of directive change, and is engaged in the process of establishing legitimacy as a focus of Micronesian opinion, a process made difficult by the existence of localized goals. Thus, on pragmatic grounds, Goodenough's participatory assumptions appear to be the only feasible ones for Micronesia at this time.

A third reason is that his propositions are inferred largely from a consideration of examples of community change within the realities of Micronesian cultures of which he has been a long-term student. The judgment of the reality of his propositions from this perspective, however, must be tempered with the criticism that his examples have been drawn, for the most part, from change in localized rural contexts rather than from a consideration of the impact of the increasing urbanization and of the large-scale (relative to the population) economic institutions represented by recent administration, and by military, fishing, and tourist enterprises. These are changes brought about by decisions which can provide but limited scope for the consideration of goals of small, local communities.

If these reasons are appropriate to the goals for Micronesia and rationally related to the type of social development which is feasible in the present stage of leadership, Goodenough's analysis may be considered further to suggest a method by which goals and action programs may be formulated. Considered as a method of decision making,

the proposition is that if this method is followed the changes which flow from it are more likely to be desirable and capable of realistic implementation. Essentially, the method requires that Micronesians participate in decision making, that decisions be informed by cultural realities, including cultural values, and that provision be made for processes of education to inform Micronesians of means, ends, and relationships in change programs. This is a general method, applicable to a wide range of decision-making areas, and immediately germane to the education system considered as institutions in interaction with the society or as institutions which prepare future leadership. It has proved to be fruitful for implications for the manpower training system, (the manpower board), adult education (particularly preparation for the plebiscite), the priority for secondary and tertiary education, and for the relationships between school and community and expatriate and Micronesian curriculum teams.

Harbison and Myers' model for human resource development provides specific, direct propositions for the relationship between education and systems growth. The skill and mobility of manpower is regarded as a necessary condition both for the development of an economic strategy and the ability to carry it out. Data in support of the empirical relationship between education and productivity for the general proposition have been derived from a systematic, comparative examination of many countries, and the relative importance of different types of education is indicated by the relative magnitude of correlations between these types and productivity. Beyond this, the model utilizes comparative analysis to identify the typical problems of countries at different levels of human resource development, and suggests a generalized methodology from which needs may be defined, the chief aspects of which are the use of comparisons and the derivation of the economic goals of the country's leadership.

It is of course apparent that a correlation between the educational levels of manpower and the gross national product of a country does not necessarily indicate that the level of education causes economic growth, or that an average relationship derived from many countries is an accurate representation of the relationship for any one country. Employment levels, the natural resource base, and the level of technology are all important general conditions which affect the relationship. At this point, the Harbison and Myers model moves from quantitative indicators of these relationships to a logical, or qualitative examination of the types of manpower shortage which are experienced in countries at different levels of productivity. As a substitute for the empirical analysis of relationships between education and productivity in particular countries, there is the proposition that comparable countries (that is, those in "advance" of the country being considered) offer guidelines as to the type of labor force which will increase productivity in the target country. We have previously noted a problem in this proposal, namely that the empirical relationship depends upon the similarity of the economies being compared, and the comparative data are not at present adequate to enable comparisons between closely similar economies to be made.

The problem is illustrated by the use, in the SRI plan, of U. S. data and data from other countries more advanced than Micronesia. The data which is more comparable to Micronesia in terms of the scale of productivity is still of doubtful relevance to the Micronesian case, as the examples of Peru, Paraguay, and Ecuador, with their different political and social conditions, might suggest.

Yet, despite these weaknesses in empirical relationships, the comparative approach does appear to be more adequate than the alternatives of trend analysis[1], or forecasting approaches because of the empirical weaknesses from which these suffer, and because economic policy in Micronesia is so uncertain at this point. The need for more precise empirical data for countries at this level will be met only when they are examined in detail, as a specific unit of human resource analysis. The wide approximations involved in applying the model to Micronesia indicate just how vital this analysis is for the Level I countries. Again, Black's criterion for useful comparative analysis that the units of comparison should be similar would direct this study to those countries which have large external inputs into the economy and a limited primary and secondary industry potential.

To the more or less quantifiable relationships between education and economic growth, the Harbison and Myers model adds consideration to the strategy of leadership and the political and social pressures relevant to manpower development. Here the central proposition is that a realistic and therefore feasible manpower-education policy will result only if these factors are integrated with the comparative data. The relationship between different types of manpower-education policies and their political and social consequences is, however, a poorly conceptualized and inadequately surveyed area. The reported research has utilized only such simple indicators of human resource development as the percentage of literacy in the population, the primary enrollment ratio, and the level or investment in education -- indicators which have a low correlation even with the strictly economic data (see Almond and Coleman 1960). Thus, the planner must add subjective judgment of the consequences of his proposals for human resource development for the political and social systems to his judgments of the goals and the pressures which these systems generate. Case study material such as the study of mass education and politics in Nigeria (Abernethy 1965), the study of unemployed graduates in Nigeria (Callaway 1963: 351-71), and the study of student aspirations and expectations in Ghana (Foster 1965) do provide some insights into some of the issues. But comparative studies of the consequences of even this one issue of mass education are lacking. Clearly, analysis of the consequences of such alternatives as mass versus selective education, of on-the-job training versus formal schooling, of adult versus child education in countries with social, economic, and political circumstances similar to the target country is vital to the planner who attempts to utilize this type of goal-oriented model.

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[1]For a trenchant empirical criticism of this approach even for developed economies, see A. M. Farrag, "The Value of Occupation Industry Data for Forecasting Purposes", International Labour Review, Vol. 95, No. 4, April, 1967.

The search for models to guide educational planning can be regarded as an attempt to define the consequences of different characteristics of education programs for the broader aspects of development. Since these aspects of development are goal-oriented, it is clear that normative aspects must be an important input into the planning process. There are several approaches to the definition of these norms. The planner may extrapolate goals from his own society, or those to which he is personally committed, and apply them to the country which is under consideration. He may adopt the view that the target country's goals as expressed by the ruling government or administration should guide his analysis. Alternatively, he may seek to find a more representative definition of goals by considering those of different strata of the population and/or regions of the country. In the Micronesian case, the planners have attempted this latter approach by adopting a methodology which sought to gather the opinions of Micronesians at the village level, in the towns, in positions of elected and traditional leadership, and from the widely dispersed districts, together with the opinions of Micronesian educators on specific educational issues. The concepts of goals acceptable to the Micronesians revealed by this data together with the goals of the trusteeship and administering authority, have been used to form general goal positions adopted by the planners. These goals -- of an increase in participatory self government, of an increase in the decision-making role of Micronesians, of a pattern of economic growth which retains Micronesian participation in the economy with the possible adjustments of the rate of increase in the total productivity -- are widespread among Micronesians but are not necessarily representative of all groups within Micronesian society or all policies under consideration by the administering authority.

Brian Holmes (1965) has proposed that the use of the methodologies of the social sciences, including the analysis of documents and opinion polls, could enable the planners to arrive at more precision in this search. While certain of these procedures could yield more representative, and possibly more objective data, and indicate the range and characteristics of the goals, they do not solve the problem of contradictory and conflicting goals with which the planner is faced. Here a methodology which will elicit goals is of less importance than one which might enable weights to be attached to alternatives to yield priorities or enable a reconciliation of conflicting goals to be achieved. It seems likely that decision-making models based on probability theory could form a valuable input to the planner's task, as a more objective alternative than attempts to base plans upon representative and conflicting goals.

The models discussed above are concerned with quite broad aspects of the functional relationships between education and other institutions. Planners must also be able to relate more specific characteristics of the education to these institutions through functional propositions.

The relationship between different occupational education approaches to the development of occupational skill is one of the issues posed in Micronesia. Foster's study (1965b) of vocational schools in Africa and the experience of the successful in-industry training in Great Britain (see Williams 1963), each provide examples which tend to demonstrate the relative efficiency of a pattern of general education plus on-the-job training over the development of pre-occupational technical schooling. Yet the validity of experience in these countries can be questioned for Micronesia where the training capacity of the administration is relatively weak, and industrial and business enterprise development is minimal. The use of forms of cost-benefit analysis derived from economics in certain other countries increased the utility of comparative analysis over and above the more limited traditional approach of comparative education which compares the institutional structures to be found in different countries. Again, however, the major deficiency in the available data is its lack of comprehensiveness and relevance for the target country. The use of a comparative method in this circumstance leads to propositions derived from analogies which may be false. Confidence in the propositions can be increased for Micronesia only on the basis of further comparative research in countries with similar education and economic institutions.

Further problems of the validity of more specific educational propositions are encountered when aspects of education are related to the task of promoting national integration. Equality of access to education, especially at the higher levels, the association of students from different cultural areas in common schools and tertiary institutions, the provision of a common language, and especially the importance of tertiary education were particular aspects considered by the SRI team to be potential accelerators of a national orientation among Micronesians. For each proposition there is some supporting data from the study of these relationships in other countries, in some instances in the form of case studies, in others in the form of comparative data. Again, however, there are examples of contradictory judgments embodied in the educational practices of other countries. Many countries feel that common schools for different cultural groups would exacerbate community tensions. The national language question has promoted political disputes which threaten nationalism in others. Additionally, if the proposition is held that common schooling will increase feelings of a common identity, the benefits which might accrue from it may be considered to be insubstantial in relation to the costs incurred. Until the consequences of these propositions can be stated, the planner has little sound basis on which to establish priorities among the different aspects related to national integration.

The models which we have used to inform the analysis of education in Micronesia have each been normative in the sense that they are directed toward the solution of goals held by members of the society. The chief problems which the planner faces are to identify the operative goals. The criterion that the statement of goals should be representative of the groups within the society does appear to avoid

an approach too doctrinaire or ethnocentric, and the methodologies appropriate to the criterion are not difficult to operate. The chief normative difficulty of the models arises then from two sources: a) the difficulty of reconciling conflicting goals and b) the amount of subjective judgment allowed for by the methodology. In the long run, the reconciliation of conflictive goals is the task of the political leadership in any society, but it does seem likely that the planner's short-term task will benefit from greater use of probability analysis.

The comparative analysis which has yielded propositions as to the conditions of systems growth and as to the relationships between education and this growth is uneven in respect to its evidential base and level of abstraction. It therefore poses two general problems for the planner. He must continuously assess the validity of the explicit or implicit comparison, and he must rely heavily on judgmental analysis. These problems can be overcome only by further comparative analysis which will refine the units of analysis from those which yield comprehensive comparisons across the full range of development and to the more detailed comparison of units which are similar with respect to levels of development and which can also be equated on other relevant dimensions.

Finally, comparative models do not yet yield propositions which have precision for many issues and cannot yield data of the cost-benefit type which will indicate the consequences of various alternatives in terms of the conditions of the target country. There is no substitute for <u>in situ</u> research to yield answers to such questions as the effect of different types of local curriculum, the nature of local attitudes toward specific language policies, or the effects of common schooling for different ethnic groups. The more comprehensive planning efforts, therefore, should seek to identify and expose those issues for which local research is most vital, and provide for a research function in the education program.

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